

INDUSTRIAL RUGGED
MOBILE & EMBEDDED
SOLUTIONS

Rugged Mobile Computer
Rugged Tablet
Vehicle Mount Computer
Industrial Display & Panel PC
IoT Gateway
Embedded Computing
Digital Signage



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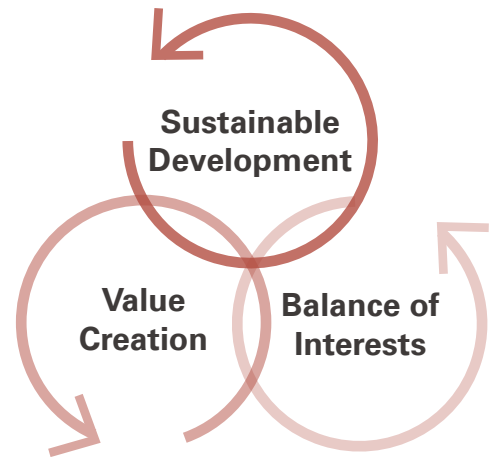
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Introduction

About Winmate

Headquartered in Taipei, Taiwan, Winmate Inc. has been dedicated to researching, developing and manufacturing the latest in industrial displays and rugged devices for 20 years.

Today, Winmate creates intelligent systems that advance the Internet of Things (IoT) and enterprise-level communications across the globe for industrial and high-tech clients. High standards of technology and quality control make Winmate an industrial leader dedicated to high standards and continued excellence.



Computing Solutions for Vertical Markets

Wimate has been on the leading edge of rugged, mobile technologies ranging from industrial displays to touchscreens, digital signage to embedded panel PCs, rugged tablets, and handheld devices.

These technologies are specifically designed and engineered for the world's most challenging environments - transportation and logistics, marine and military, railway, oil and gas, medical, smart grid, healthcare, and field service.



Global Reach

With service offices in the USA, Canada, Germany, China and Taiwan, Winmate is able to offer responsive, reliable and quick support on all of our products.



The Winmate Difference

Innovation and Ruggedness

Blending innovations and ruggedness, our products are designed to meet the requirements of vertical markets' environmental standards.

Engineering Intelligence

We are committed to maintaining the highest standards in engineering excellence to ensure our products deliver reliability, durability, and optimized performance.

Quality Commitment

Quality assurance and entire engineering processes are undergo in-house. This is why we invested significantly in our state-of-the-art testing facility and offer global support.

“ **INNOVATIVE
TECHNOLOGY FOR
OPERATIONAL
EXCELLENCE.** ”

Efficiency

Our team is committed to efficiency and maintaining the shortest possible development cycles. From design to testing the whole development process undergoes in-house to achieve the market advantage in speed and quality.

Reliability

Reliability, service and support are part of our foundation. Every product undergoes the scrutiny of industrial standards testing to verify electrical, mechanical, thermal, and firmware design performance.

Customized Solutions

Years of experience allow Winmate to offer customized solutions for different applications. From product design to accessories, our engineering team designs and support the system integration process.

- CUSTOMIZED CONFIGURATION
- CUSTOM OS IMAGE
- CUSTOM BIOS
- ENCLOSURE DESIGN
- PERIPHERALS AND OPTIONS
- CUSTOM-DESIGNED ACCESSORIES

Introduction

IoT Ready
Solutions

Industries

Highlights

Introduction

Technology Capability

For enterprises operating in rugged or potentially hazardous environments, access to the latest technology built specifically for these demanding industries is imperative. At Winmate, we have the engineering expertise and strategic partnerships with technology companies to provide customers the leading edge in industrial-grade communications tools that maximize operational efficiency, safety, asset tracking and data management.

We implement some of the latest technologies available to design our rugged products:

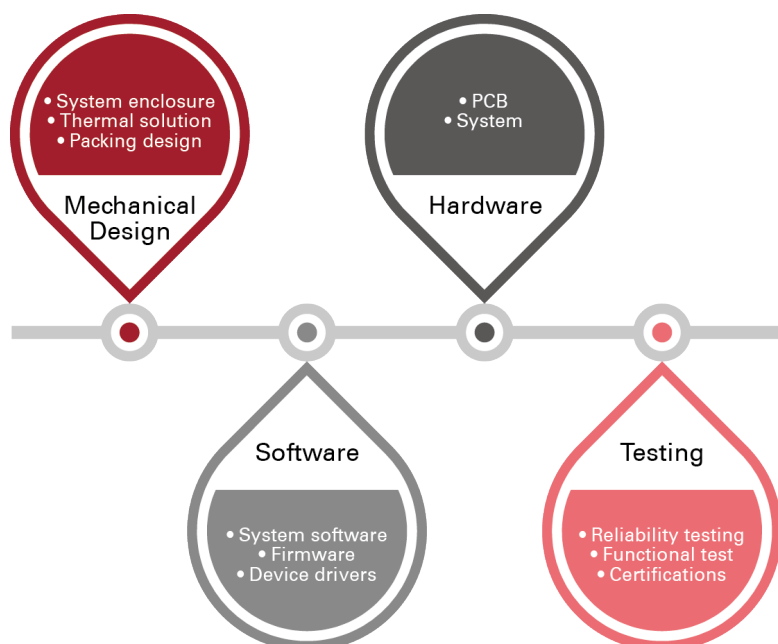
- Dry and wet optical bonding
- Panel enhancement for sunlight readability
- Anti-reflection (AR) and anti-glare (AG) glass protection coating
- Light sensor
- Hyper dimming
- Electronic potting
- Touch screen integration: projected capacitive, resistive or SAW touch
- Waterproof enclosure
- Thermal solutions

From R&D to testing all of our facilities are located in-house giving us freedom to research and implement the latest technologies available when designing new products.

Innovative technologies combined with engineering expertise, customization experience and ruggedness make Winmate products a top choice in the industrial computer market.

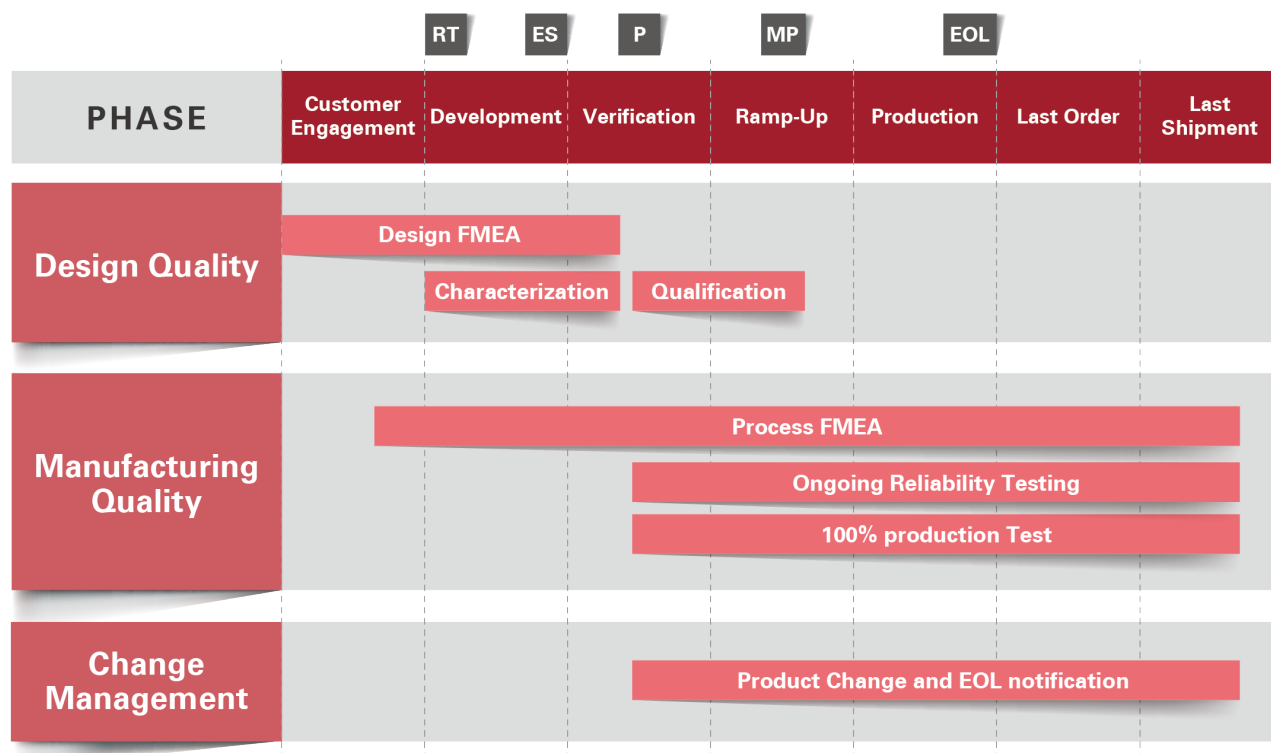
Solution Design

At Winmate, we specialize in full-scope solution design for enterprise customers operating in challenging environments. From mechanical and hardware solutions to software customization, and verification and validation, Winmate executes every step of the engineering process.



Product Development

Our product design is based upon a comprehensive assessment of the entire life cycle. This assessment includes all phases of a product's lifecycle from customer engagement, development, verification, ramp-up, production to last order and last shipment.



Strategic Partnership

For enterprises operating in difficult or potentially hazardous environments, access to the latest technology, built specifically for these demanding industries, is imperative.

The engineering process and in-depth knowledge at Winmate of electrical, mechanical, thermal and firmware design ensures optimised performance, durability and reliability with every rugged mobile product we create. Our technologies undergo a battery of tests at our in-house, state-of-the-art testing facility to verify this performance.

Together with our own engineering expertise, we have also formed strategic partnerships with leading technology companies in order to provide you with the leading edge in industrial-grade communications tools to maximise your operational efficiency, safety, asset tracking and data management.

With partners such as Microsoft, Intel, Qualcomm, Sierra and AWS, we have the advantage of gaining early access to the latest developments, which means we can provide our customers with cutting-edge technology and software.



Introduction

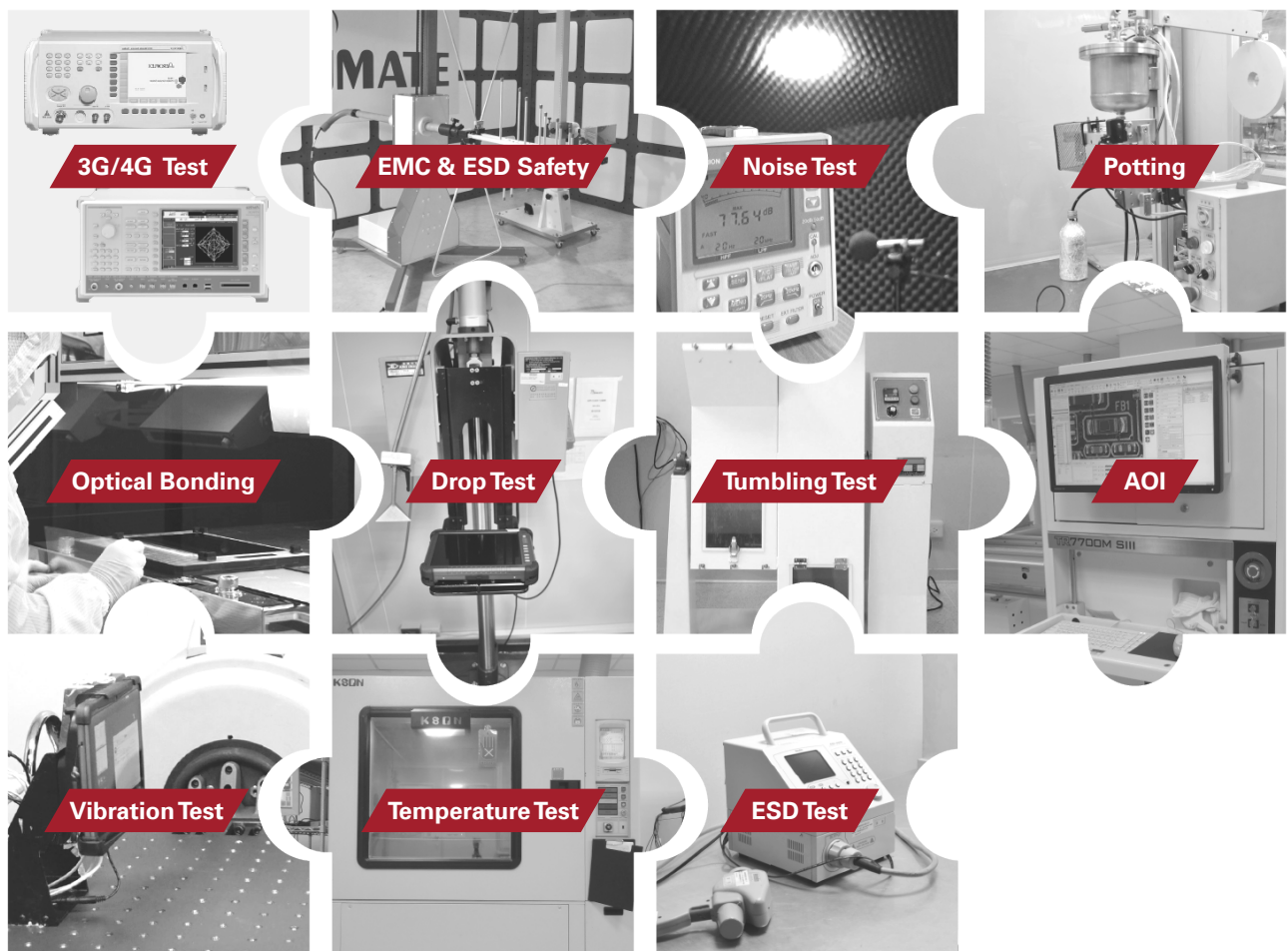
Reliability Test Facilities

Winmate provides consulting and testing services to ensure products are in compliance with the latest global industrial standards and regulations. By working closely with the regulatory agencies Winmate guarantees that the product time to market is minimized. The results are documented and provided to regulatory agencies for certification.

With our range of facilities, we can also carry out testing, which means you can get the job done in one place. From design to environmental stress test, Winmate controls all the process in-house. In-house testing facility allows Winmate to achieve high standards of product reliability and ruggedness with the shortest possible product development cycle.

Rather than outsourcing critical reliability test, we are able to perform vibration, drop, thermal and dry heat, and EMC and EMI tests, as well as radio emission and susceptibility, giving Winmate the market advantage in speed and quality.

Design validation tests include:



Quality Assurance & Product Certification

Our long-term experience ensures perfect quality management system that maintains consistent product service and meets applicable regulatory requirements while remaining agile enough to quickly evolve in response to industry demands and advances in technology.

Winmate's QA and product certification programs are international standard ISO 9001:2008 compliant in accordance to the applicable industry regulations.

Quality Assurance

Certification		System	Since	Certified by
ISO 9001:2008		Quality Management System	2002	TÜV Rheinland
ISO 14001:2006		Environmental Management System	2008	TÜV Rheinland
CG 6004		Corporate governance system	2008	Taiwan Corporate Governance Association
IECQ QC080000		Hazardous substance process management (Included RoHS)	2009	TÜV Rheinland
ISO 14064:2006		Greenhouse gas accounting & Verification	2009	TÜV Rheinland
ANSI/ESD S20.20: 2007		Control of static electricity & electrostatic	2010	SGS
ISO 13485:2016		ISO Standard for the design and manufacture of medical devices	2018	SGS
IEC-80079		ATEX/ IECEx QAR, QAN	2015	CSA

Product Certification

Certification	System	Certified by
Hazardous Location	Class 1 Div 2 Group A-D, T4/ ATEX/ IECEx	UL/ CSA/ LCIE   
Military	MIL-STD-810G (Reliability) MIL-STD-461F (EMI, optional) DO-160 (Aviation)	
Marine	DNV 2.4 IEC 60945/ ECDIS Color calibration IACS-E10	DET Norske Veritas AS SGS Taiwan
Industrial/ Mobile	CE – R&TTE / FCC (WiFi, BT, 3G, LTE/ RF) Safety – UL60950/ UL508 IP65/67 – IEC60529	SGS UL Intertek
Cellular/ Carrier	PTCRB (Certification of Wireless Devices) AT&T; VzW carrier approval	CTIA Authorized Test Lab/ Intertek
Railway	EN50155	SGS Taiwan
Transportation	E-mark certification / SAE	Societe Nationale De Certification ET D'Homologation
Medical	EN60601-1-1 EN60601-1-2	Cerpass Technology

Introduction

IoT Ready
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Industrial IoT Solution and Service

Overview

The Internet of Things (IoT) is transforming the everyday physical objects that surround us into an ecosystem of information that will enrich our lives. IoT has the greatest potential to improve operator productivity in production plants, improving the accuracy of warehouse management and inventory monitoring, reducing non-technical operations losses and enabling smart product tracking.

First-class enterprises already benefit from IoT and plant-floor data using the collected data to predict and prevent equipment failure, improve reliability and reduce downtime. Manufacturers apply data insights to upgrade quality and lower inspection costs.

According to PWC Research, IoT is expected to drive a massive increase in connected devices and revenue growth across multiple industries. Now it is the right time to capture value from this developing megatrend.



**Make the most out of IoT data.
Deploy IoT solutions to optimize operations**

Technology

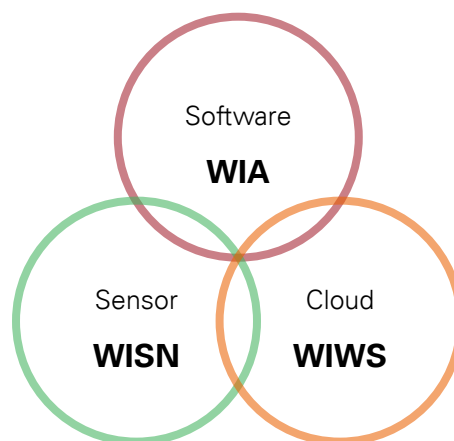
Industrial Internet of Things requires the right software, hardware and expertise to make the whole ecosystem work for the needs of enterprises. And Winmate is ready to provide new solutions and services for the IoT market.

Winmate IoT Solution & Services



Service

- Software:** Winmate Intelligent Agent (WIA)
- Remote BIOS update, distribution of batch
 - Group device management
 - System diagnostics
- Sensor:** Winmate IoT Sensor Node (WISN)
- Customized sensor board
- Cloud:** Winmate IoT Web Service (WIWS)
- Monitor remote devices



Industries

Winmate understands the need for ruggedness and uninterrupted productivity when it comes to operating in challenging environments. We provide application-ready computing solutions for marine and military, oil and gas, warehouse and logistics, factory automation, healthcare and other industrial vertical markets.



Oil & Gas

ATEX and Class 1 Division 2 (C1D2) certified solutions for collecting data in remote rig and pipeline locations.



Marine

IEC 60945 compliance and DNV (Det Norske Veritas) certified solutions for maritime applications in a vessel or bridge.



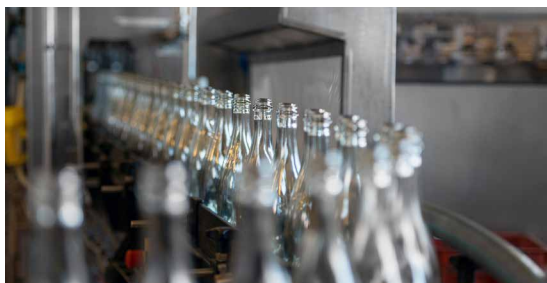
Military

Rugged military products comply with MIL-STD-810G environmental and MIL-STD-461F EMC standards.



Healthcare

Medical certified computing solutions for safe operations and collecting sensitive data in a hospital environment.



Food & Beverage Industry

Waterproof IP69K, IP67 and IP65 panel PC and display to meet high hygiene standards, resist moisture and chemical cleaning.



Factory Automation

Wide range of advanced technologies for factory automation from data collection to operator control and remote device management.



Warehouse & Logistics

Vehicle mounted computers for inventory management whether in inventory delivery, port logistics or warehousing.



Field Service

Rugged mobile computers for data collection needs of workshops, field surveys, delivery services.



Fleet Management

Track and optimize routes with our vehicle mounted computers or rugged tablets with vehicle docking.



Agriculture

Rugged operator panels and monitors for automation of agricultural machinery and tractors.



Utilities

Embedded systems and gateways for data collection and transfer in remote locations. Connect everything, control everywhere.



Heavy Duty

Rugged operator panels for heavy duty applications in heavy trucks, mining tractors and machinery.

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Highlights

Highlights indicate our recommended and most popular products, to help you determine which product to choose from our extensive portfolio.

Mobile

13.3" Ultra-Rugged Tablet **M133K**



p.54

- 13.3", 1920 x 1080 with multitouch
- Intel® Core™ i5-7200U
- Windows 10 IoT Enterprise

10.1" Rugged Windows Tablet **M101P, M101S**



p.41

- 10.1", 1920 x 1200 with multitouch
- Intel® Pentium® N4200/ Intel® Core™ i5-7200U
- Windows 10 IoT Enterprise

10.1" Medical Tablet **M101P-ME**



p.299

- 10.1", 1920 x 1200 with multitouch
- Intel® Pentium® N4200
- IEC 60601-1, 60601-1-2

10.1" Explosion-Proof Tablet **M101S-EX**

Q2, 2019



- 10.1", 1920 x 1200 with multitouch
- Intel® Core™ i5-7200U
- Windows 10 IoT Enterprise

10.1" Rugged Android Tablet **M101RK**



p.45

- 10.1", 1920 x 1200 with multitouch
- Arm® Cortex®-A72 Dual-core + A53 Quad-core
- Android 7.1

8" Rugged Windows Tablet **M101BK**



p.35

- 8", 1280 x 800 with QWERTY keypad
- Intel® Celeron® N2930
- Windows 10 IoT Enterprise

8" Rugged Windows Tablet **M900P**

Q2, 2019



p.37

- 8", 1280 x 800 with multitouch
- Intel® Pentium® N4200
- Windows 10 IoT Enterprise

8" Rugged Android Tablet **M900Q**

Q3, 2019



- 8", 1280 x 800 with multitouch
- Qualcomm® Snapdragon™ 660 Octa-core
- Android 8.1

7" Rugged Android Tablet **M700DM9**

Q2, 2019



- 7", 1280 x 720 with multitouch
- Arm® Cortex®-A53 Octa-core
- Android 9.0

10.4" Vehicle Mount Computer **FM10Q**

Q2, 2019



p.62

- 10.4", 1024 x 768 with multitouch
- Qualcomm® Snapdragon™ 820 Quad-core
- Android 8.1

7" Vehicle Mount Computer **FM07**



p.60

- 7", 1024 x 600 with multitouch
- Intel® Celeron® N3350
- Windows 10 IoT Enterprise

5" Rugged Android Mobile Computer **E500RM8**



p.25

- 5", 1280 x 720 with multitouch
- Arm® Cortex®-A53 Octa-core
- Android 7.0

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Highlights

Highlights indicate our recommended and most popular products, to help you determine which product to choose from our extensive portfolio.

Embedded

IP67 IoT Gateway **EACIL67**



p.119

- Intel® Celeron® N3350
- USB Type-C for video, touch and power input
- Waterproof enclosure, IP67-rated

Type-C IoT Gateway **EACIL21**



p.119

- Intel® Celeron® N3350
- USB Type-C for video, touch and power input
- Compact size

Android IoT Gateway **EACFA20**



p.119

- Freescale™ Cortex®-A9 i.MX6 Dual-core
- Expansion with 15+ combinations
- Compact size

Windows IoT Gateway **EACIL20**



p.119

- Intel® Celeron® N3350
- Expansion with 30+ combinations
- Microsoft Azure IoT, AWS IoT Greengrass Certified

Embedded iPC **EAC PRO-1K90**



p.121

- Intel® Xeon® E3, Intel® Core™ i7/i5/i3
- Flexibility, rich I/O capacity and expansion
- Windows 10 IoT Enterprise

Embedded iPC **I330EAC-1KW**



p.126

- Intel® Core™ i5-7200U
- Four USB3.0, HDMI, VGA, DVI, RS232/422/485
- Windows 10 IoT Enterprise

7~18.5" Display Type-C Series



p.175

- 7~18.5" with multitouch
- USB Type-C for video, touch and power input
- Open frame, panel mount or stand alone

7~15" Heavy Duty Panel PC GS Series



p.254

- 7~15" with multitouch
- Freescale™ Cortex®-A9 i.MX6 Dual-core
- Intel® Celeron® N2930 Bay Trail-M

4.3~15.6" Multitouch Android HMI EL Series



p.81

- 4.3~15.6" with multitouch
- Freescale™ Cortex®-A9 i.MX6 Dual-core
- Android 6.0, Ubuntu 16.04

15~21.5" Multitouch Chassis HMI PT Series



p.90

- 15~21.5" with multitouch
- Intel® Celeron® N2930 Bay Trail-M
- Freescale™ Cortex®-A9 i.MX6 Dual-core

15.6 / 18.5" Medical Display W15L100-PTA3-ME, W18L100-PTA3-ME



p.301

- 15.6/ 18.5" with multitouch
- VGA, HDMI, USB for touch
- IEC 60601-1, IEC 60601-1-6, EN60601-1-2

27/ 32" Medical Display M270TF, M320TF



p.303

- 27/ 32", 3840 x 2160 with multitouch
- HDMI 2.0, HDMI 1.4, VGA, DP 1.2, Dual DVI
- IEC 60601, EN60950-1

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PLANNED

Time in Planned Downtime
01:29:18

Time in Planned Downtime Job / Shift
01:29:18 / 01:29:18

DOWNTIME

Time in Downtime
01:29:18

Time in Downtime Job / Shift
01:29:18 / 01:29:18

SETUP

Time in Setup
01:29:18

Time in Setup Job / Shift
01:29:18 / 01:29:18



Run Speed
15646
sleeves / hour

SLEEVES IN
245649/900000

SLEEVES OUT
245617/900000

RUNNING

Time in Running
01:29:18

Time in Running Job / Shift
01:29:18 / 01:29:18

SHIFT

JOB

OUT

EVENTS

STARTS



RUGGED MOBILE COMPUTER

Rugged Mobile Computer

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4.3" Rugged Mobile Computer

E430 Series	21
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4.3" Rugged Windows Mobile Computer

S430T2 Series	23
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5" Rugged Android Mobile Computer

E500 Series	25
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Rugged Mobile Computer

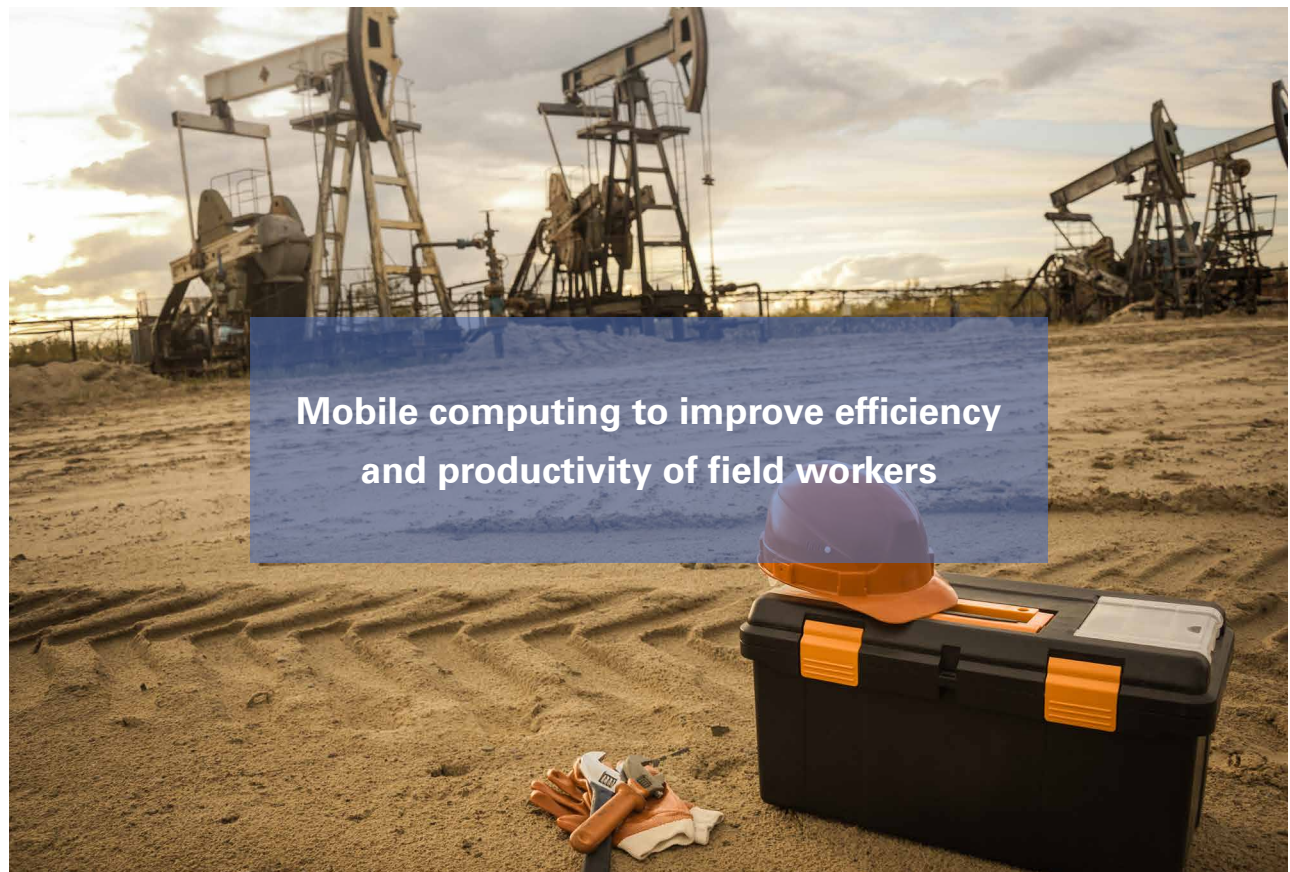
Overview

Winmate's rugged mobile solutions are built to withstand rigors of the harshest environments and designed to improve efficiency and productivity of field workers. Durable mobile computers provide workers with access to information anytime no matter where the task brings them. Wireless connectivity, data collection and data transfer allows you keep in touch with the operator all day long.

Our rugged mobile computers include:

- The latest Android™ or Windows® operating system
- Advanced data collection options
- Durable design

Winmate's rugged mobile computers are built to last, reducing total cost of ownership over time. Retailers, manufacturers, logistics companies, field service organisations, choose Winmate mobile computers every day to improve every day operations.



Product Overview

Winmate offers both Android and Windows-based rugged mobile computers with additional application-focused features such as barcode scanner, RFID and NFC reader. All the devices are rugged, waterproof and drop resistant.

Rugged Mobile Computer Comparison Table



Model Name		E430RT	E430RM4L	S430T2	E500RM8
Panel Size		4.3"	4.3"	4.3"	5"
Brightness		400 nits	400 nits	400 nits	500 nits
Touch		Projected capacitive	Projected capacitive	Resistive	Projected capacitive
Processor		TI Cortex®-A8 1 GHz	Arm® Cortex®-A53 Quad-core 1.3 GHz	TI Cortex®-A8 1 GHz	Arm® Cortex®-A53 Octa-core 1.3GHz
Operating System	WHM 6.5	✓		✓	
	Win CE 6.0	✓		✓	
	Android 7.0		✓		✓
WWAN	3G	✓		✓	
	4G LTE		✓		✓
Bluetooth	BT3.0	✓		✓	
	BT4.0		✓		✓
Peripheral	Barcode Reader	✓	✓	✓	✓
	NFC Reader		✓		✓
	HF RFID Reader	✓		✓	✓
	Smart Card Reader				✓
	Fingerprint Reader				✓
Battery Capacity		3900 mAh	3900 mAh	5000 mAh	3900 mAh
Battery Operating Time		10 hr	20 hr	12 hr	20 hr
IP Rating		IP65	IP65	IP67	IP65

Size

4.3"

5"

4.3" Rugged Mobile Computer

E430 Series

Custom configuration



Barcode
Reader



HF RFID
Reader



Additional
Storage



Application



High Voltage Power Line Inspection

"LIGHTWEIGHT, MOBILE
SOLUTION WITH HIGH
ACCURACY GPS."

Winmate 4.3-inch rugged handheld with customization in RFID reader, high accuracy GPS, and software is able to read the tags located at the base of the tower.

**" RUGGED & COMPACT.
IDEAL FOR FIELD WORK. "**

- 4.3 inch, 800 x 480 screen
- P-cap multitouch
- Arm® Cortex® -A53 Quad-core (E430RM4L)
- TI Cortex® -A8 OMAP DM3730 (E430RT)
- Android 7.0 (E430RM4L), Win CE 6.0/WEH 6.5 (E430RT)



2 MP webcam

8MP rear camera (E430RM4L), 5 MP rear camera (E430RT)

WWAN, Wi-Fi, BT, GPS

NFC (E430RM4L)

Lightweight portability at just 260g

Micro USB OTG

3.7V 3900mAh Li-poly removable battery

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Universal USB Adapter

Micro USB Cable

Micro SD Card 16GB

Hand Strap

Optional

Charging Dock

Battery Charging Dock

Vehicle Charging Dock

Battery

Lanyard

Micro USB Host Cable (OTG Cable)

UHF RFID Reader

Mobile Printer

E430 Rugged Mobile Computer

Arm® Cortex® -A53 Quad-core

TI Cortex® -A8 OMAP DM3730



Model Name	4.3" E430RM4L	4.3" E430RT-C	4.3" E430RT-M
Display			
Resolution	800 x 480	800 x 480	800 x 480
Brightness	400 nits	400 nits	400 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)	800:1 (Typ.)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Arm® Cortex® -A53 Quad-core, 1.3GHz	TI Cortex® -A8 OMAP DM3730, 1 GHz	TI Cortex® -A8 OMAP DM3730, 1 GHz
Memory	2GB SDRAM	512 MB SDRAM	512 MB SDRAM
Storage	16GB eMMC (Up to 32GB), Micro SD Card (Up to 32GB)	512 MB NAND flash, Micro SD Card (Up to 32GB)	512 MB NAND flash, Micro SD Card (Up to 32GB)
OS	Android 7.0	Windows CE 6.0	Windows WEH 6.5
Wireless Communications			
WLAN	802.11 a/b/g/n	802.11 b/g/n	802.11 b/g/n
Bluetooth	Bluetooth 4.0	Bluetooth (V2.1 + EDR)	Bluetooth (V2.1 + EDR)
WWAN	3G/4G LTE (GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA)	3G/4G LTE (GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA)	3G/4G LTE (GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA)
GPS	Built-in GPS	Built-in u-Blox GPS	Built-in u-Blox GPS
Connectors			
Connectors	SIM card, Micro SD card, Micro USB, Pogo Pin	SIM card, Micro SD card, Micro USB, Pogo Pin	SIM card, Micro SD card, Micro USB, Pogo Pin
Audio			
Audio	Mic, Earphone, 1.2W Speaker	Mic, Earphone, 1.2W Speaker	Mic, Earphone, 1.2W Speaker
User Controls			
Buttons	Volume - +, Power, Function Home, Menu, ESC, Search	Volume - +, Power, Function Home, Menu, ESC, Search	Volume - +, Power, Function Home, Menu, ESC, Search
LED Indicators	1 x LED Indicator	1 x LED Indicator	1 x LED Indicator
Sensors	Light, Proximity, G-sensor, Digital Compass	Light, Proximity, G-sensor, Digital Compass	Light, Proximity, G-sensor, Digital Compass
Mechanical			
Dimensions	132.57 x 81.87 x 27.4 mm	132.57 x 81.87 x 27.4 mm	132.57 x 81.87 x 27.4 mm
Net Weight	260g	260g	260g
Environment			
Operating Temp.	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
IP Rating	IP65	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft, Free to concrete	MIL-STD-810G Method 516.6, 4 ft, Free to concrete	MIL-STD-810G Method 516.6, 4 ft, Free to concrete
Power Considerations			
Adapter	5V/1A, USB	5V/1A, USB	5V/1A, USB
Battery	3.7V 3900mAh Li-poly	3.7V 3900mAh Li-poly	3.7V 3900mAh Li-poly
Battery Operating Time	20 Hr	20 Hr	20 Hr
Data Capture			
Camera	Rear: 8 MP, Front: 2 MP	Rear: 5 MP, Front: 2 MP	Rear: 5 MP, Front: 2 MP
Barcode	Motorola SE4500 (Optional)	Motorola SE4500 (Optional)	Motorola SE4500 (Optional)
RFID	RFID Reader (Optional)	RFID Reader (Optional)	RFID Reader (Optional)
NFC	Read / Write, Peer to Peer	-	-
Certifications			
Safety	CE, FCC, CCC	CE, FCC, CCC, UL	CE, FCC, CCC, UL

4.3" Rugged Windows Mobile Computer

S430T2 Series

Custom configuration



3G



Barcode
Reader



HF RFID
Reader



Application



Electronic Farrowing Feeder

"OPTIMIZE FEEDING AND IMPROVE SOW VITALITY."

The S430T with robust communications options offers easy in-pen sow identification and ability to monitor weight and feed of pig; helping to fine tune individual feeding curves.

**“ CONVENIENT KEYPAD
AND ROBUST
COMMUNICATIONS.**

”



- 4.3-inch, 800 x 480 screen
- Resistive touch
- TI Cortex® A8
- WEH 6.5 (S430T2-M), Win CE 6.0 (S430T2-C)

19 keys alphanumeric keypad (S430T2-NKM/NKC)

Wi-Fi, BT, GPS

Serial port, mini USB

3.7V 5000mAh Li-Ion smart battery

5 MP rear camera with LED auxiliary light

IP67 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Universal USB Adapter

Micro USB Cable

Micro SD Card

Hand Strap

Optional

Micro SD Card

Office Charging Dock

Vehicle Adapter

Standard Spare battery

Mobile Printer

S430T2 Rugged Windows Mobile Computer

TI Cortex® A8



Model Name	4.3" S430T2
Display	
Resolution	800 x 480
Brightness	400 nits
Contrast Ratio	800:1 (Typ.)
Sensors	Light Sensor, Proximity Sensor, G-sensor, Digital Compass
Touch	Resistive
System	
Processor	TI Cortex® A8 1GHz
Memory	512MB MDDR
Storage	4GB eMMC
OS	Windows Embedded Compact 6.0, Windows Embedded Handheld 6.5 Pro
Wireless Communications	
WLAN	802.11 /b/g/n
Bluetooth	Bluetooth 2.1 + EDR
WWAN	Optional 3G (For Data Transmission)
GPS	Built-in GPS module
Connectors	
Connectors	1 x SIM card slot, 1 x Micro SD card slot, 1 x Mini USB, 1 x Serial port, 1 x Dock Port, 1 x DC Input
Audio	
Audio	1 x Built-in Mic, 1 x Earphone, 1 x Audio Jack, 1 x Speaker
User Controls	
Buttons	QWERTY 35 key or 19 keys- Alphanumeric Keypad
LED Indicator	1 x LED indicator
Mechanical	
Dimensions	178 x 89 x 30 mm
Net Weight	470g
Environment	
Operating Temp.	-10°C to 50°C
Humidity	95% (Non-condensing, RH)
IP Rating	IP67
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft, Free to concrete
Power	
Adapter	5V 3A Adapter
Battery	3.7V 5000mAh Li-Ion smart battery
Battery Operating Time	12 Hr
Data Capture	
Camera	Rear: 5 MP
Barcode	Motorola SE4500 1D/2D Barcode (Optional)
RFID	RF Transmit Frequency 13.56MHz, ISO 14443-A (R/W), ISO 15693 (R/W)), Mifare One (S50), Mifare One (S70)
Certifications	
Safety	CE, FCC, CCC

Rugged Mobile Computer

Size

4.3"

5"

5" Rugged Android Mobile Computer

E500 Series

Custom configuration



Barcode Reader



Fingerprint Reader



Smart Card Reader



Battery Hotswap



“ **ALL-IN-ONE.**
FOR DATA COLLECTION. ”

Application



Public Safety

“SPEED UP REAL TIME
DATA EXCHANGE AND
IDENTIFICATION.”

The E500RM8 combines barcode, fingerprint and smart card reader for various data collection options on the field. Customized logo, customized software settings ensure flexibility for deployment in police applications.

- 5-inch, 1280 x 720 screen
- P-cap multitouch
- Arm® Cortex® -A53 Octa-core
- Android 7.0



Wi-Fi, BT4.0, GPS, NFC

Supports two SIM cards

Micro USB for data transfer

2 MP webcam

8 MP rear camera with LED

3.7V 3900mAh Li-ion removable battery

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Power Plug

Micro USB Cable

Micro SD Card

Hand Strap

Optional

Charging Dock

Battery Charging Dock

Battery

E500 Rugged Android Mobile Computer

Arm® Cortex®-A53 Octa-core



Rugged Mobile Computer

Size

4.3"

5"

Model Name	5"
	E500RM8
Display	
Resolution	1280 x 720
Brightness	500 nits
Contrast Ratio	800:1 (Typ.)
Sensors	Light Sensor, Proximity Sensor, G-sensor, Digital Compass
Touch	Projected Capacitive
System	
Processor	Arm® Cortex®-A53 Octa-core 1.3GHz
Memory	2GB SDRAM
Storage	16GB eMMC
OS	Android 7.0
Wireless Communications	
WLAN	802.11 a/b/g/n
Bluetooth	Bluetooth 4.0
WWAN	GSM/GPRS/EDGE, b2/b3/b5/b6 WCDMA/HSDAP/HSPUA, b1/b2/b4/b5/b8 FDD-LTE / TDD-LTE, b1/b3/b4/b7/b8/b38/b39/b40/b41
GPS	GPS / AGPS / GLONASS
Connectors	
Connectors	2 x SIM card slot, 1 x Micro SD card slot, 1 x Micro USB, 1x Power Jack, 1 x Docking Connector
User Controls	
Buttons	1 x Volume - +, 1 x Power button, 2 x Function button, 4 x Front Key
LED Indicator	1 x LED indicator
Mechanical	
Dimensions	85.9 x 163.2 x 22.5 mm
Net Weight	315 gram
Environment	
Operating Temp.	-10°C to 50°C
IP Rating	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft, Free to concrete
Power	
Adapter	5V 2A Adapter
Battery	3.7V 3900mAh Li-ion removable battery
Battery Operating Time	20 hrs
Data Capture	
Camera	Rear: 8 MP with LED auxiliary light autofocus Front: 2 MP (Either one with Barcode Reader)
Barcode	1D/2D Barcode Reader (Optional)
Smart Card	ISO 7816 part 1,2,3 (Optional)
Fingerprint	Fingerprint Reader (Optional)
NFC	Default NFC (Read / Write, Peer to Peer mode)
Certifications	
Safety	CE, FCC, CCC

2





RUGGED TABLET

Rugged Tablet

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7" Rugged Windows Tablet

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10.1" Rugged Windows Tablet

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10.1" Rugged Android Tablet

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Rugged Tablet

Overview

Mobility is the new trend for industrial applications. With the latest development in mobility and battery management technology, Winmate combines its existing ruggedness, panel technology, and software capabilities and delivers this in our rugged tablet product line.

Our rugged tablets include:

- The latest Android™ or Windows® operating system
- Robust wireless communications
- Data capture possibilities
- IP65 water and dust proofing

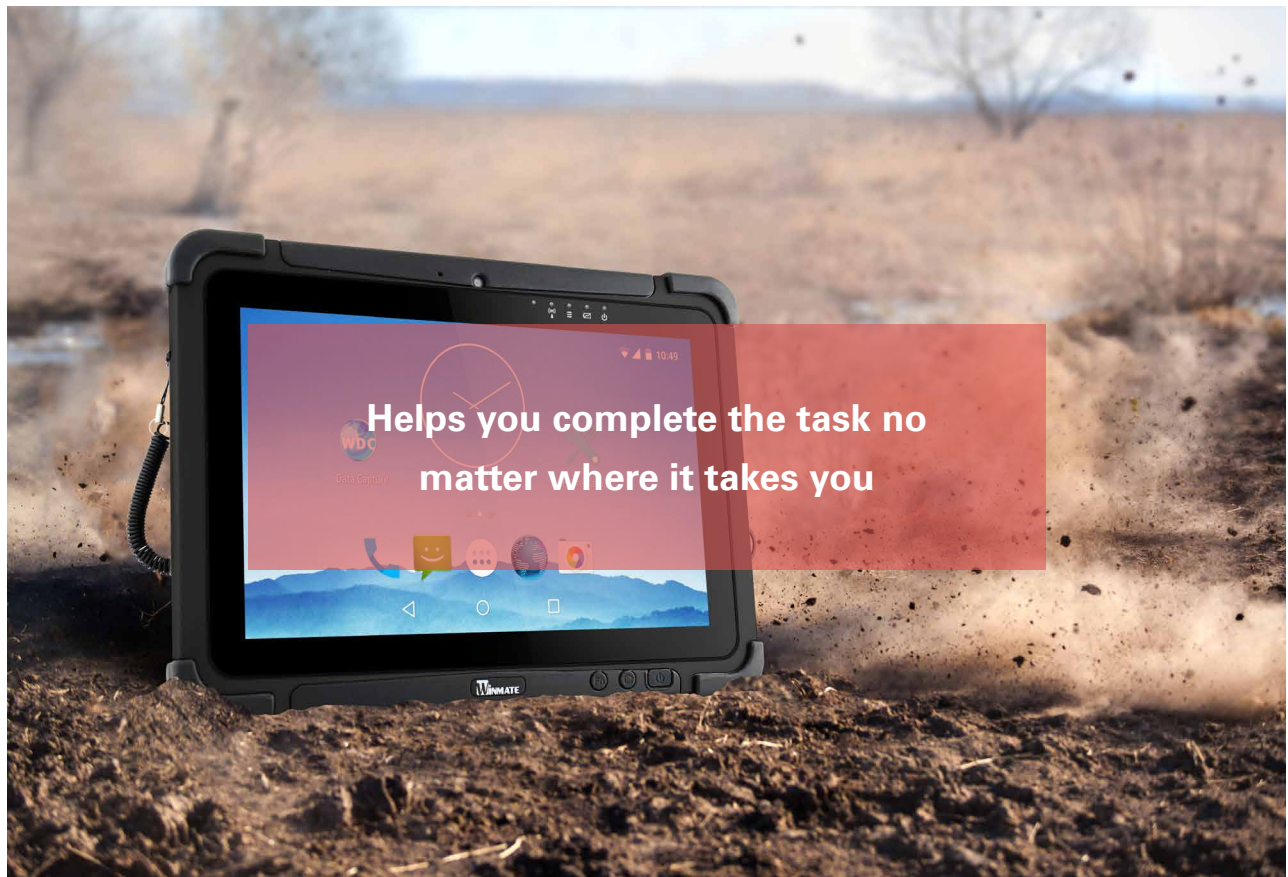
With all the application-focused features and data collection options, Winmate rugged mobile devices will fit into your needs no matter where your task takes you.

Size

7"

8"

10.1"



Product Overview

Winmate rugged tablets offer the most in advanced data collection and communications for mobile users in demanding, and potentially hazardous, environments. Whether oil and gas, manufacturing, transportation, warehouse, or field service and utilities, Winmate has developed a series of rugged, enterprise-ready and fully customizable solutions for mobile data collection, asset tracking, communications, mapping and more.

Rugged Tablet Comparison Table



Model Name		M101P	M101S	M101B	M101RK	M101M8	M101BK	M900P	M800BW	M700DM8	M9020
Size		10.1"	10.1"	10.1"	10.1"	10.1"	8"	8"	8"	7"	7"
Brightness		800 nits	800 nits	700 nits	800 nits	400 nits	500 nits	500 nits	550 nits	650 nits	900 nits
Touch		Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Resistive
Processor		Intel® Pentium® N4200	Intel® Core™ i5-7200U	Intel® Celeron® N2930	Arm® Cortex®-A72 Dual-core + A53 Quad-core	Arm® Cortex®-A53 Octa-core	Intel® Celeron® N2930	Intel® Pentium® N4200	Intel® Braswell® N3160	Arm® Cortex®-A53 Octa-core	Intel® Celeron N2930
Operating System	Windows 10 IoT	✓	✓	✓			✓	✓	✓		✓
	Windows 8			✓					✓		✓
	Windows 7			✓					✓		✓
	Android 7.0				✓	✓				✓	
	Ubuntu 16.04	✓	✓	✓							
WWAN	3G		✓	✓	✓	✓	✓		✓	✓	✓
	4G LTE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bluetooth	BT4.0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peripheral	Barcode Reader	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NFC Reader				✓	✓					
	HF RFID Reader	✓	✓					✓			
	UHF RFID Reader	✓		✓							✓
	Card Reader	✓		✓					✓		
	Fingerprint Scanner							✓			
Battery Capacity		5140 mAh	5140 mAh	5140 mAh	5300 mAh	5140 mAh	5140 mAh	4200 mAh	5200mAh	5300 mAh	10280 mAh
Battery Operating Time (Standard)		8 hr	8 hr	8 hr	8 hr	10 hr	6 hr		7 hr	12 hr	11 hr
Battery Operating Time (High Capacity)		16 hr	16 hr	16 hr	16 hr		12 hr				

7" Rugged Android Tablet

M700DM8 Series

Custom configuration



Barcode
Reader



Battery
Hotswap



Application



Forklift Solution

"FROM FIXED MOUNTING TO PORTABLE SOLUTION."

The M700DM8 rugged tablet with vehicle docking delivers portable and rugged solution for warehouse management and route optimization.

“ **COMPACT.
VIBRATION RESISTANT.** ”

- 7 inch, 1280 x 720 screen
- P-Cap multitouch
- Arm® Cortex®-A53 Octa-core
- Android 7.0



2MP webcam
8MP rear camera
Micro USB OTG
Micro SD card slot
2GB RAM, 16GB eMMC
Wi-Fi, Bluetooth 4.0, GPS
Up to 20 hours battery operating time
IP65
Shock, vibration and drop MIL-STD-810G
-10°C to 50°C operating temperature

Accessories

Standard

Universal Adapter	Battery
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Optional

Battery Charging Dock	Vehicle Dock	Desk Dock	Handstrap	Carry Bag
Micro SD Card	Capacitive Touch Stylus	Mobile Printer	Vehicle Adapter	

M700DM8 Rugged Android Tablet

Arm® Cortex®-A53 Octa-core



Model Name	7" (16:9)
	M700DM8
Display	
Resolution	1280 x 720
Brightness	650 nits
Contrast Ratio	500:1 (Typ.)
Sensors	G-sensor, light sensor
Touch	Projected capacitive
System	
Processor	Arm® Cortex®-A53 Octa-core 1.3Ghz
Memory	2GB DDR3 SDRAM
Storage	16GB eMMC
OS	Android 7.0
Wireless Communications	
WLAN	802.11 a/b/g/n
Bluetooth	Bluetooth 4.0, Support BLE mode + wide-band speech
WWAN	GSM/GPRS/EDGE, WCDMA/HSDAP/HSPUA, FDD-LTE, TDD-LTE
GPS	GPS/AGPS/GLONASS
Connectors	
Connectors	1 x Micro USB OTG, 1 x 2.5Ø 5V DC Power Input, 1 x SIM Slot, 1 x Micro SD Card Slot
Audio	
Audio	1 x 1.2W Speaker, 1 x Headset jack (Mic+Earphone), 2 x Microphone
User Controls	
Buttons	1 x Power Button, 2 x Volume Key, 1 x Home, 1 x Menu, 1 x Return, 1 x Search
LED indicator	Power, Battery
Mechanical	
Dimensions	212.4 x 132.8 x 19 mm
Net Weight	550g
Environment	
Operating Temp.	-10°C to 50°C
Humidity	5% to 95% (Non-condensing, RH)
IP Rating	IP65
Shock	MIL-STD-810G M516.6
Vibration	MIL-STD-810G M514.6
Drop	MIL-STD-810G M516.6 5 ft, Free to concrete
Power	
Power Input	12V DC (Power adapter), 7.4V DC (Battery)
Battery	Li-Polymer Battery 5300 mAh
Adapter	100~240V, 50-60Hz, 5VDC
Data Capture	
Camera	Rear: 8 MP with LED auxiliary light with autofocus, Front: 2 MP
Barcode	Motorola SE4500 1D/2D Barcode Reader (Optional)
NFC	NFC (Read/Write, Peer to Peer mode)
Certifications	
Safety	CE, FCC, CCC

Rugged Tablet

Size

7"

8"

10.1"

7" Rugged Windows Tablet

M9020 Series

Custom configuration



Memory



Storage



Barcode Reader



UHF RFID Reader



“ IP67 WATER AND DUST PROOF. ”

Application



Harvester Operator Control

“MORE EFFICIENT WOOD PROCESSING.”

The M9020 rugged tablet with a vehicle mounted solution was able to withstand the strong vibrations when the logging machine is operating and obtains real-time production data.

- 7 inch, 1024 x 600 screen
- Resistive touch with QWERTY keypad
- Intel® Bay Trail-M N2930
- Windows® 10 IoT Enterprise
- Windows® Embedded 8.1 Industry Pro
- Windows® Embedded Standard WS7P



2MP webcam

5MP rear camera with LED auxiliary light, autofocus

4GB DDR3L-1600 RAM, 64GB mSATA SSD

Wi-Fi, BT4.0, GPS

USB 2.0, RS-232

Micro SD card slot (Up to 32GB)

IP67 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Adapter and Power Cord

Extend VGA Cable

Hand Strap

Cable Power Wire

Stylus

Optional

Vehicle Dock

2-Slot Battery Charger

Mobile Printer

Battery

Carry Bag

M9020 Rugged Windows Tablet

Intel® Bay Trail-M N2930



Model Name	7" (16:9) M9020B
Display	
Resolution	1024 x 600
Brightness	900 nits
Sensors	Light sensor for auto backlight adjustment, Position sensor (Accelerometer) for portrait or landscape screen orientation
Touch	Resistive
System	
Processor	Intel® Bay Trail-M N2930, 1.83GHz Processor (Up to 2.16GHz)
Memory	1 x 4GB DDR3L-1600 SO-DIMM RAM (Up to 8GB)
Storage	64GB M.2 SSD (Up to 512GB)
OS	Windows Embedded Standard 7 Windows Embedded 8.1 Industry Pro Windows 10 IoT Enterprise
Wireless Communications	
WLAN	802.11 ac/a/b/g/n WiFi
Bluetooth	Bluetooth 4.0 combo module
WWAN	Optional 3G (Support HSPA/ UMTS/GPRS/WCDMA/GSM) or LTE (MC7304/MC7354)
GPS	Built-in Neo-6 GPS module
Connectors	
Connectors	1 x USB 2.0 A Type, 1 x RS-232, 1 x Headset jack, 1 x 2.5Ø DC Power Input
User Controls	
Buttons	QWERTY keyboard 5 Programmable Function Keys Dedicated Scanner and camera buttons
LED indicator	Power and Battery Status
Mechanical	
Dimensions	229.75 x 183 x 54 mm
Net Weigh	1.43 kg
Environment	
Operating Temp.	-20°C to 60°C (AC Mode), -20°C to 50°C (Battery Mode)
Humidity	5% to 95% (Non-condensing, RH)
IP Rating	IP67
Vibration	MIL-STD-810G
Drop	Multiple 6-ft (1.8 m) drops to concrete
Power	
Power Input	19V DC
Battery	2 x Li-ion battery pack, 7.4V, 3100mAh (Hot-swappable)
AC Adapter	65W
Data Capture	
Camera	Front: 2MP, Rear: 5MP
RFID	UHF RFID Reader (Optional)
Barcode	2D Barcode Reader
Certifications	
Safety	CE, FCC

Rugged Tablet

Size

7"

8"

10.1"

8" Rugged Windows Tablet M101BK Series

NEW

Custom configuration



Barcode
Reader



HF RFID
Reader



Micro SD
Card Slot



High Capacity
Battery 12 hr



4G/LTE



“ HYBRID DESIGN ”

Application



Diagnostics Tool at Workshop

“SIMPLIFIES CAR INSPECTION.”

Portable adjustment and measurement device for wheel alignment system now considerably simplifies the regular car inspection with special steering wheel mount and desk docking station.

- 8-inch, 1280x800 WXGA screen
- P-cap multitouch with optical bonding
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10 IoT Enterprise
- With Full QWERTY Keypad



5MP rear camera

USB 3.0

Micro HDMI

Micro SD card slot

4GB DDR3L-1600, 64GB m.2 SATA SSD

Wi-Fi, Bluetooth 4.0, GPS, Galileo

Up to 6 hours battery operating time

Battery hot-swap support

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Adapter & Power Cord Capacitive Stylus Standard Battery

Optional

Desk Dock	Vehicle Dock (Without VGA output)	Battery Charger	Active Pen	High Capacity Battery
Hand Strap	UHF RFID Reader	Smart Card Reader	LAN Cable	Carry Bag
Micro HDMI Cable	RS-232 Cable	Mobile Printer	Vehicle Charger	Shoulder Strap

M101BK Rugged Windows Tablet

Intel® Celeron® N2930 Quad-core



Model Name	8" M101BK
Display	
Resolution	1280 x 800
Brightness	500 nits
Contrast Ratio	800:1 (Typ.)
Viewing angle	-88~88 (H); -88~88 (V)
Touch	Projected capacitive
System	
Processor	Intel® Celeron® N2930 Quad-core 1.83 GHz
Memory	4GB SODIMM DDR3L-1600
Storage	64GB m.2 SATA SSD
OS	Windows 10 IoT Enterprise
Wireless Communications	
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.0 Dual Mode (Classic + Low Energy)
WWAN	Optional LTE support: FDD LTE, TDD LTE, DC-HSPA+/HSPA+/HSPA/UMTS, TD-SCDMA, GSM/GPRS/EDGE
GPS	GPS, Galileo
Connectors	
Audio	2 x Stereo Speaker (80 db output)
Connectors	1 x 30-pin Combo Conn for Giga-LAN, 1 x USB 3.0, 1 x 3.5mm Audio Combo Conn. (Mic in/Line Out), 1 x Micro SIM Slot, 1 x Power Jack
User Controls	
Buttons	Physical Keyboard: ISO/IEC 9995-3 QWERTY Keypad, IP65 water and dust proof, with LED backlight (Keypad dimensions : min. 10x10mm) Physical Buttons: 1 x Power, 10 x Function Keys
LED Indicator	Power, Battery
Mechanical	
Dimensions	271.8 x 198.2 x 22 mm (10.7 x 7.80 x 0.87 inches)
Net Weight	1.35 kg (2.97 lbs)
Environment	
Operating Temp.	AC Mode: -20°C to 60°C (-4°F to 140°F), Battery Mode: 0°C to 50°C (32°F to 122°F),
Humidity	10% to 90% (Non-condensing, RH), MIL-STD 810G Method 507.5 Procedures I
IP Rating	IP65 certified, dustproof and waterproof
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6 Procedure IV, 4 ft to concrete
Power	
Power Input	19V DC
Battery	7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P)
AC Adapter	100~240V, 50-60Hz
Data Capture	
Camera	Rear: 5MP camera with autofocus, barcode decoding support and LED flash
Certifications	
Safety	ECE, FCC, IC

Rugged Tablet

Size

7"

8"

10.1"

8" Rugged Windows Tablet M900P Series

NEW

Custom configuration



4G/ LTE



Barcode
Reader



HF RFID
Reader



EMV/MSR
Reader



Micro SD
Card Slot



Computrace



Application



Connected Truck

"CONNECTIVITY FOR
VEHICLES ON THE ROAD."

Winmate developed a smart truck solution for a heavy-duty vehicle. Installed on a dashboard by vehicle cradle, our 8-inch rugged tablet M900P and custom designed vehicle gateway VG-100 now connect in-vehicle systems and allow status monitoring of a semi-truck in Europe.

**“ PORTABLE POWERFUL
SOLUTION. ”**

- 8-inch, 1280 x 800 screen
- P-Cap multitouch
- Intel® Pentium® N4200 Apollo Lake
- Windows 10 IoT Enterprise



2MP webcam

8MP rear camera with autofocus and LED light

USB 3.0 Type-A, USB 3.0 Type-C

D-sub for vehicle gateway connection

Wi-Fi, Bluetooth 5.0, GPS, GLONASS

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Battery

Capacitive Stylus

Optional

Vehicle Gateway

Vehicle Cradle

USB Expansion Cable

Battery Charger

Handstrap

Shoulder Strap

Carry Bag

Desk Dock

M900P Rugged Windows Tablet

Intel® Apollo Lake Quad-Core

NEW

Q2,2019



Rugged Tablet

Model Name	8"
	M900P
Display	
Resolution	1280 x 800
Brightness	510 nits
Contrast Ratio	800:1
Viewing angle	-85~85 (H); -85~85 (V)
Touch	Projected capacitive
System	
Processor	Intel® Pentium® N4200 Apollo Lake
Memory	4GB LPDDR4
Storage	64GB M.2 TLC SSD (Up to 128GB)
OS	Windows 10 IoT Enterprise
Wireless Communications	
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 5.0
WWAN	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT)
GPS	GPS, GLONASS
Audio	
Audio	2 x Built-in Mic, 2 x 1W Speaker
Connectors	
Connectors	1 x USB3.0 TYPE-C, 1 x USB3.0 TYPE-A 1 x Audio Combo Conn. (Mic in/Line Out), 1 x Power Jack, 1 x Micro SD Slot, 1 x Micro SIM Slot
User Controls	
Buttons	1 x Power Button, 1 x Menu/Home key, 3 x Programmable Function Key
LED indicator	Power, Battery, HDD Access, RF
Mechanical	
Dimensions	225 x 148 x 20.5 mm (8.85 x 5.82 x 0.80 inches)
Net Weight	0.9 kg (2 lbs) with standard battery
Environment	
Operating Temp.	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
Humidity	10% to 90% (Non-condensing, RH)
IP Rating	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 5 ft to concrete
Power	
Power Input	12~19V DC
Battery	7.6V 4200 mAh Li-Polymer Battery (2S2P)
Adapter	100~240V, 50-60Hz
Data Capture	
Camera	Rear: 8MP with LED flash, Front: 2 MP Webcam
Barcode	1D/2D Barcode Reader (Optional)
RFID	HF RFID Reader (Optional)
EMV/ MSR Card Reader	EMV/ MSR Card Reader (Optional)
Certifications	
Safety	CE, FCC, IC, UL 60950

Size

7"

8"

10.1"

8" Rugged Windows Tablet

M800 Series

Custom configuration



Barcode
Reader



HF RFID
Reader



Smart Card
Reader



High Capacity
Battery 12 hr



4G/ LTE



M12 Power
Connector



GLONASS



Memory



Storage



“ HYBRID DESIGN ”

Application



Farming GPS Tracking

“PRECISE NAVIGATION
AND LOCATION
TRACKING.”

The M800 series rugged tablet with M12 connector and expansion box CPM800 integrate high-accuracy GPS and support moisture free rating of IP65 and shows stable performance.

- 8-inch 1280 x 800 screen
- P-Cap multitouch
- Intel® Celeron® N3160
- Windows® 10 IoT Enterprise



2MP webcam
5MP rear camera
USB 3.0
Micro HDMI
Micro SD card slot
4GB DDR3L-1600, 64GB m.2 SATA SSD
Wi-Fi, Bluetooth 4.0, GPS, Galileo
Up to 7 hours battery operating time
IP65 waterproof and dustproof
Shock, vibration and drop MIL-STD-810G
-10°C to 50°C operating temperature

Accessories

Standard

Power Adapter Standard Battery

Optional

Expansion Box	M12 to D-Sub Male Cable	Vehicle Cradle	VESA Mounting Plate	Capacitive Stylus
Vehicle Charger	Micro HDMI Cable	Carry Bag	Active Pen	Hand Strap
Battery Charger				

M800 Rugged Windows Tablet

Intel® Celeron® N3160



Model Name	8"	8"
	M800BW	M800BW-M12
Display		
Resolution	1280 x 800	1280 x 800
Brightness	550 nits	550 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)
Viewing Angle	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)
Touch	Projected capacitive	Projected capacitive
System		
Processor	Intel® Celeron® N3160 1.6GHZ CPU, 2M Cache, up to 2.24GHz	Intel® Celeron® N3160 1.6GHZ CPU, 2M Cache, up to 2.24GHz
Memory	4GB SODIMM DDR3L-1600 (up to 8GB)	4GB SODIMM DDR3L-1600 (Up to 8GB)
Storage	64GB M.2 MLC SSD (Up to 512GB)	64GB M.2 MLC SSD (Up to 512GB)
Operating System	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Wireless Communications		
WLAN+Bluetooth	Intel® Dual Band Wireless 802.11 a/b/g/n/ac+ Bluetooth 4.0 Dual Mode Combo module	Intel® Dual Band Wireless 802.11 a/b/g/n/ac+ Bluetooth 4.0 Dual Mode Combo module
WWAN	4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT), 3G (HSPA+, GSM/GPRS/EDGE)	4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT), 3G (HSPA+, GSM/GPRS/EDGE)
GPS	u-Blox NEO-M8N (Support GPS+Glonass)	u-Blox NEO-M8N (Support GPS+Glonass)
Connectors		
Connectors	2 x USB 3.0, 1 x Micro HDMI, Service Window for WWAN Module, Micro SD, Micro SIM: Located in the battery compartment, 1 x M12 Connector - USB signal & power (Optional)	2 x USB 3.0, 1 x Micro HDMI, Service Window for WWAN Module, Micro SD, Micro SIM: Located in the battery compartment, 1 x M12 Connector - USB signal & power
Audio		
Audio	2 x Built-in Digital Mic, 1 x Speaker	2 x Built-in Digital Mic, 1 x Speaker
User Controls		
Buttons	1 x Power, 2 x Programmable Function Keys	1 x Power, 2 x Programmable Function Keys
LED indicator	Power, Battery status, SSD status, RF status	Power, Battery status, SSD status, RF status
Mechanical		
Dimensions	228.8 x 165.8 x 27 mm	228.8 x 165.8 x 27 mm
Net Weight	1.1 Kg	1.1 Kg
Environment		
Operating Temp.	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete	MIL-STD-810G Method 516.6, 4 ft to concrete
Power		
Power Input	12V DC or 19V DC	12V DC or 19V DC
Battery	7.6V typ. 5200mAh Li-ion Battery (2S2P)	7.6V typ. 5200mAh Li-ion Battery (2S2P)
Power Input Options	N/A	One M12 male connector external cable with D-SUB 15pin male connector (Use with CPM BOX)
Data Capture		
Camera	Front: 2MP, Rear: 8MP	Front: 2MP, Rear: 8MP
Barcode	1D/ 2D Barcode Reader (Optional)	1D/ 2D Barcode Reader (Optional)
RFID	HF RFID Reader (Optional)	HF RFID Reader (Optional)
Fingerprint	Fingerprint Reader (Optional)	Fingerprint Reader (Optional)
Smart Card	Smart Card Reader (Optional)	-
Certifications		
Safety	CE, FCC	CE, FCC

Rugged Tablet

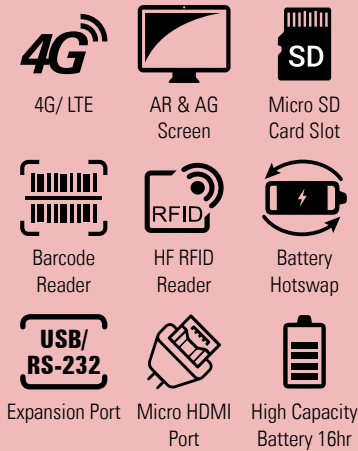
Size

7"

8"

10.1"

Custom configuration



Application



Enterprise Mobility Solution

"LONG BATTERY LIFE AND VARIOUS DATA CAPTURE OPTIONS."

The 10.1" tablet with customization in logo, housing, and packing. User can use the mobile tablet to collect the equipment information during daily facilities check. The Microsoft program base makes IT control easier.

10.1" Rugged Windows Tablet M101 P/S Series

NEW



“ ROBUST TABLET TO WITHSTAND INDUSTRIAL USE. ”

- 10.1-inch, 1920 x 1200 screen
- P-Cap multitouch
- Intel® Pentium® N4200 Apollo Lake (M101P)
- Intel® Core™ i5-7200U Kaby Lake (M101S)
- Windows 10 IoT Enterprise



2MP webcam

8MP rear camera with autofocus with LED flash

Glove/ Rain/ Stylus mode, support active pen

Wi-Fi, Bluetooth 5.0, GPS, GLONASS

USB 3.0 Type-A, USB 3.0 Type-C

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Adapter and Power Cord Capacitive Stylus Standard Battery

Optional

Smart Card Reader (M101P)	Vehicle Dock (Without VGA output)	Vehicle Cradle	Battery Charger	Active Pen
Desk Dock	High Capacity Battery	Hand Strap	UHF RFID Reader	VESA Mount Kit
Shoulder Strap	Carry Bag	Micro HDMI Cable	Vehicle Charger	Mobile Printer

M101 P/S Rugged Windows Tablet

Intel® Pentium® N4200 Apollo Lake

Intel® Core™ i5-7200U Kaby Lake



Model Name	10.1" M101P	10.1" M101S
Display		
Resolution	1920 x 1200	1920 x 1200
Brightness	800 nits	800 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)
Viewing angle	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)
Touch	Projected capacitive	Projected capacitive
System		
Processor	Intel® Pentium® N4200 Apollo Lake 1.10 GHz, up to 2.50 GHz with turbo boost technology	Intel® Core™ i5-7200U Kaby Lake 2.3GHz up to 2.8GHz with turbo boost technology
Memory	4GB SODIMM DDR3L-1600 (Up to 8GB)	4GB DDR4 SDRAM (Up to 8GB)
Storage	64GB SSD (Up to 512GB)	64GB SSD (Up to 512GB)
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Wireless Communications		
WLAN	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 5.0	Bluetooth 5.0
WWAN	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT)	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT)
GPS	GPS, GLONASS	GPS, GLONASS
Connectors		
Connectors	1 x Optional Micro HDMI, 1 x USB 3.0 (Type A), 1 x USB3.0 (Type C), 1 x Audio Combo connector (Mic in or Line Out), 1 x Power jack, 1 x Micro SD Slot	1 x Micro HDMI, 1 x USB 3.0 (Type A), 1 x USB 3.0 (Type C), 1 x Audio Combo Conn. (Mic in or Line Out), 1 x Power Jack, 1 x Micro SD Slot
Audio		
Audio	1 x Built-in Mic with Noise Cancellation, 2 x 1W Speaker	1 x Built-in Digital Mic with Noise Cancellation, 2 x 1W Speaker
User Controls		
Buttons	1 x Power, 1 x Menu/ Home, 2 x Programmable Function Key, 2 x Volume or Brightness	1 x Power, 1 x Menu/Home, 2 x Programmable Function Keys, 2 x Volume or Brightness
LED Indicator	Power, Battery, HDD Access, RF	Power, Battery, HDD Access, RF
Mechanical		
Dimensions	271.8 x 197.2 x 19 mm	271.8 x 197.2 x 21 mm
Net Weight	1.2 kg (2.6 lbs)	1.25 kg (2.7 lbs)
Environment		
Operating Temp.	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete	MIL-STD-810G Method 516.6, 4 ft to concrete
Power		
Power Input	12~19V DC	12~19V DC
Battery	7.4V, typ. 5140 mAh Li-Polymer Battery (2S1P) 7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P, Optional)	7.4V, typ. 5140 mAh Li-Polymer Battery (2S1P) 7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P, Optional)
AC Adapter	100~240V, 50-60Hz/19V DC	100~240V, 50-60Hz/19V DC
Data Capture		
Camera	Rear: 8MP with LED flash Front: 2 MP	Rear: 8MP with LED flash Front: 2 MP
Barcode	1D/2D Barcode Reader (Optional)	1D/2D Barcode Reader (Optional)
RFID	HF/UHF RFID Reader (Optional)	HF/UHF RFID Reader (Optional)
Certifications		
Safety	CE, FCC, IC	CE, FCC, IC

Rugged Tablet

Size

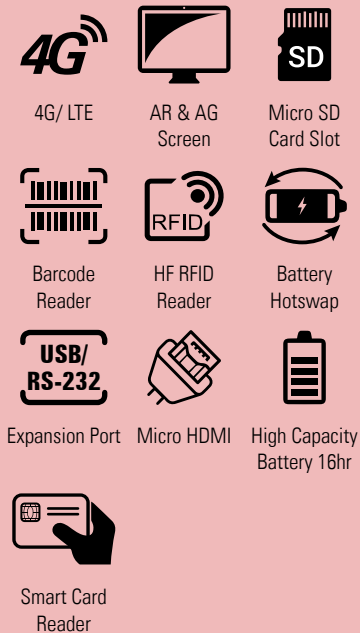
7"

8"

10.1"

10.1" Rugged Windows Tablet M101 B Series

Custom configuration



Application



Ambulance Vehicle Mount Solution

“FAST ACCESS TO PATIENT
INFORMATION.”

The M101B rugged tablet customized with LTE module and smart card reader help ECR professionals to access patient information on-the-go. The solution includes a vehicle cradle for in-vehicle mounting and charging. Winmate rugged mobile solution improve the effectiveness of ambulance and save lives.

“**SUNLIGHT READABLE.
ROBUST. RELIABLE.**”

”

- 10.1-inch, 1920 x 1200 screen (M101B)
- 10.1-inch, 1280 x 800 screen (M101BL)
- P-Cap multitouch
- Intel® Celeron® N2930 Quad-core
- Windows 10/8/7



2MP webcam

5MP rear camera with autofocus and LED flash

Glove/ Rain/ Stylus mode, support active pen

Wi-Fi, Bluetooth 4.0, GPS

USB3.0, 30-pin Combo conn (Giga-LAN or RS-232)

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Adapter and Power Cord Capacitive Stylus Standard Battery

Optional

Desk Dock	Vehicle Dock (Without VGA output)	Vehicle Cradle	Battery Charger	Active Pen
Smart Card Reader	High Capacity Battery	Hand Strap	UHF RFID Reader	VESA Mount Kit
Shoulder Strap	Carry Bag	Micro HDMI Cable	Vehicle Charger	Mobile Printer
LAN Cable	RS-232 Cable			

M101 B Rugged Windows Tablet

Intel® Bay Trail-M Quad-core



Model Name	10.1"	10.1"
	M101B	M101BL
Display		
Resolution	1920 x 1200	1280 x 800
Brightness	700 nits	350 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)
Viewing angle	-89~89 (H); -89~89 (V)	-85~85 (H); -85~85 (V)
Touch	Projected capacitive	Projected capacitive
System		
Processor	Intel® Celeron® N2930 Bay Trail-M Quad-core 1.8GHz	Intel® Celeron® N2930 Bay Trail-M Quad-core 1.8GHz
Memory	4GB SODIMM DDR3L-1600 (Up to 8GB)	4GB SODIMM DDR3L-1600 (Up to 8GB)
Storage	64GB mSATA MLC SSD Up to 256GB)	64GB mSATA MLC SSD (Up to 256GB)
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems
Wireless Communications		
WLAN	802.11 a/b/g/n	802.11 a/b/g/n
Bluetooth	Bluetooth 4.0 + Class I	Bluetooth 4.0 + Class I
WWAN	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT) or 3G (HSPA+, GSM/GPRS/EDGE)	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT) or optional 3G (HSPA+, GSM/GPRS/EDGE)
GPS	GPS	GPS
Connectors		
Connectors	1 x Micro HDMI (Optional), 1 x Giga-LAN or RS-232, 1 x USB3.0, 1 x Mic in/Line Out) 1 x Power Jack, 1 x Micro SD Slot	1 x Micro HDMI (Optional), 1 x Giga-LAN or RS-232, 1 x USB3.0, 1 x (Mic in/Line Out), 1 x Power Jack, 1 x Micro SD Slot
Audio		
Audio	1 x Built-in Mic, 2 x 1W Speaker	1 x Built-in Mic, 2 x 1W Speaker
User Controls		
Buttons	1 x Power, 1 x Menu/Home, 2 x Programmable Function Keys, 1 x Volume up, 1 x Volume down	1 x Power, 1 x Menu/Home, 2 x Programmable Function Keys, 1 x Volume up, 1 x Volume down
LED Indicator	Power, Battery, HDD Access, RF	Power, Battery, HDD Access, RF
Mechanical		
Dimensions	271.8 x 197.2 x 19 mm	271.8 x 197.2 x 19 mm (10.7 x 7.76 x 0.75 inches)
Net Weight	1.2 kg (2.7 lbs)	1.2 kg (2.7 lbs)
Environment		
Operating Temp.	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete	MIL-STD-810G Method 516.6, 4 ft to concrete
Power		
Power Input	12~19V DC	12~19V DC
Battery	7.4V, typ. 5140 mAh Li-Polymer Battery (2S1P) 7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P, Optional)	7.4V, typ. 5140 mAh Li-Polymer Battery (2S1P) 7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P, Optional)
AC Adapter	100~240V, 50-60Hz, 19V DC	100~240V, 50-60Hz, 19V DC
Data Capture		
Camera	Rear: 5MPwith LED flash Front: 2MP Webcam	Rear: 5MPwith LED flash Front: 2MP Webcam
Barcode	1D/2D Barcode Reader (Optional)	1D/2D Barcode Reader (Optional)
RFID	HF/UHF RFID Reader (Optional)	HF/UHF RFID Reader (Optional)
Smart Card	Built-in Smart Card Reader (Optional)	-
Certifications		
Safety	CE, FCC, IC, UL 60950	CE, FCC, IC, UL 60950

Rugged Tablet

Size

7"

8"

10.1"

10.1" Rugged Android Tablet

M101 RK/M Series

Custom configuration



Barcode
Reader



AR & AG
Screen



Additional
Storage



Application



Bingo Games Tablet

"TOUGH ENOUGH TO
WITHSTAND REGULAR
KNOCKS & DROPS."

A customer needed a tablet display to be single point with less sensitivity. Winmate had the solution. This 10.1" tablet not only meets the demand but is also rugged and durable enough to withstand regular drops.

**RUGGED ENOUGH TO
WITHSTAND WEAR & TEAR.**

”

- 10.1-inch, 1920 x 1200 (M101RK) screen
- P-cap multitouch
- Arm® Cortex®-A53 Octa-core (M101M8)
- Arm® Cortex®-A72 Dual-core + A53 Quad-core (M101RK)
- Android 7



2MP webcam

8MP rear camera with autofocus and LED flash

Wi-Fi, GPS, BT, NFC

4G, 3G

USB OTG

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Adapter and Power Cord

Capacitive Stylus

Standard Battery

Optional

Desk Dock

Vehicle Dock

Vehicle Cradle

Battery Charger

Active Pen

Hand Strap

VESA Mount Kit

Carry Bag

Mobile Printer

M101 RK/M Rugged Android Tablet

Arm® Cortex®-A72 Dual-core + A53 Quad-core

Arm® Cortex®-A53 Octa-core



Model Name	10.1"	10.1"
	M101RK	M101M8
Display		
Resolution	1920 x 1200	1280 x 800
Brightness	800 nits	400 nits
Contrast Ratio	800:1 (Typ.)	1000:1 (Typ.)
Viewing angle	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)
Touch	Projected capacitive	Projected capacitive
System		
Processor	Arm® Cortex®-A72 Dual-core 2.0GHz + A53 Quad-core 1.5GHz	Arm® Cortex®-A53 Octa-core 1.3 GHz
Memory	2GB	2GB LPDDR3
Storage	16GB eMMC	16GB eMMC
OS	Android 7.1	Android 7
Wireless Communications		
WLAN	802.11 a/b/g/n/ac	802.11 a/b/g/n
Bluetooth	Bluetooth 4.2	Bluetooth 4.1
WWAN	GSM/UMTS/LTE (Optional)	GSM/GPRS/EDGE, WCDMA/HSDPA/HSPA, FDD-LTE, TDD-LTE (Optional)
GPS	GPS	Built-in GPS
Connectors		
Connectors	1 x Micro HDMI, 1 x USB Type C, 1 x USB (OTG), 1 x Audio Combo Conn. (Mic in/Line Out), 1 x Power Jack, 1 x Micro SD Slot	1 x Micro USB 2.0 OTG, 1 x Audio Combo connector (Mic in/Line Out), 1 x Power Jack, 1 x Micro SD Card Slot
Audio		
Audio	Built-in 1W Speaker x 2	1 x Audio Combo connector (Mic in or Line Out)
User Controls		
Buttons	Power, Home, Back, Menu, Volume	Power, Home, Back, Menu, Volume
LED Indicator	LED x 1 (Status)	Power, Battery, HDD Access, RF
Mechanical		
Dimensions	271.8 x 197.2 x 19 mm	271.8 x 197.2 x 19 mm
Net Weight	0.99 kg	0,99 kg
Environment		
Operating Temp.	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
Humidity	10% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Rating	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete	MIL-STD-810G Method 516.6, 4 ft to concrete
Power		
Power Input	19V DC	19V DC
Battery	7.4V, typ. 5300 mAh, min. 5140 mAh Li-Polymer Battery (2S1P)	7.4V, typ. 5140 mAh Li-Polymer Battery (2S1P) (Optional hot-swap battery)
Adapter	110-240 AC to 19V DC out	100~240V/ 12V DC 3A
Data Capture		
Camera	Front: 2MP with built-in mic Rear: 8MP with autofocus and LED flash	Front: 2MP with built-in mic Rear: 8MP with autofocus and LED flash
Barcode	1D/2D Barcode Reader	2D Barcode Reader
NFC	-	NFC
Certifications		
Safety	CE, FCC, IC	CE, FCC, IC

Rugged Tablet

Size

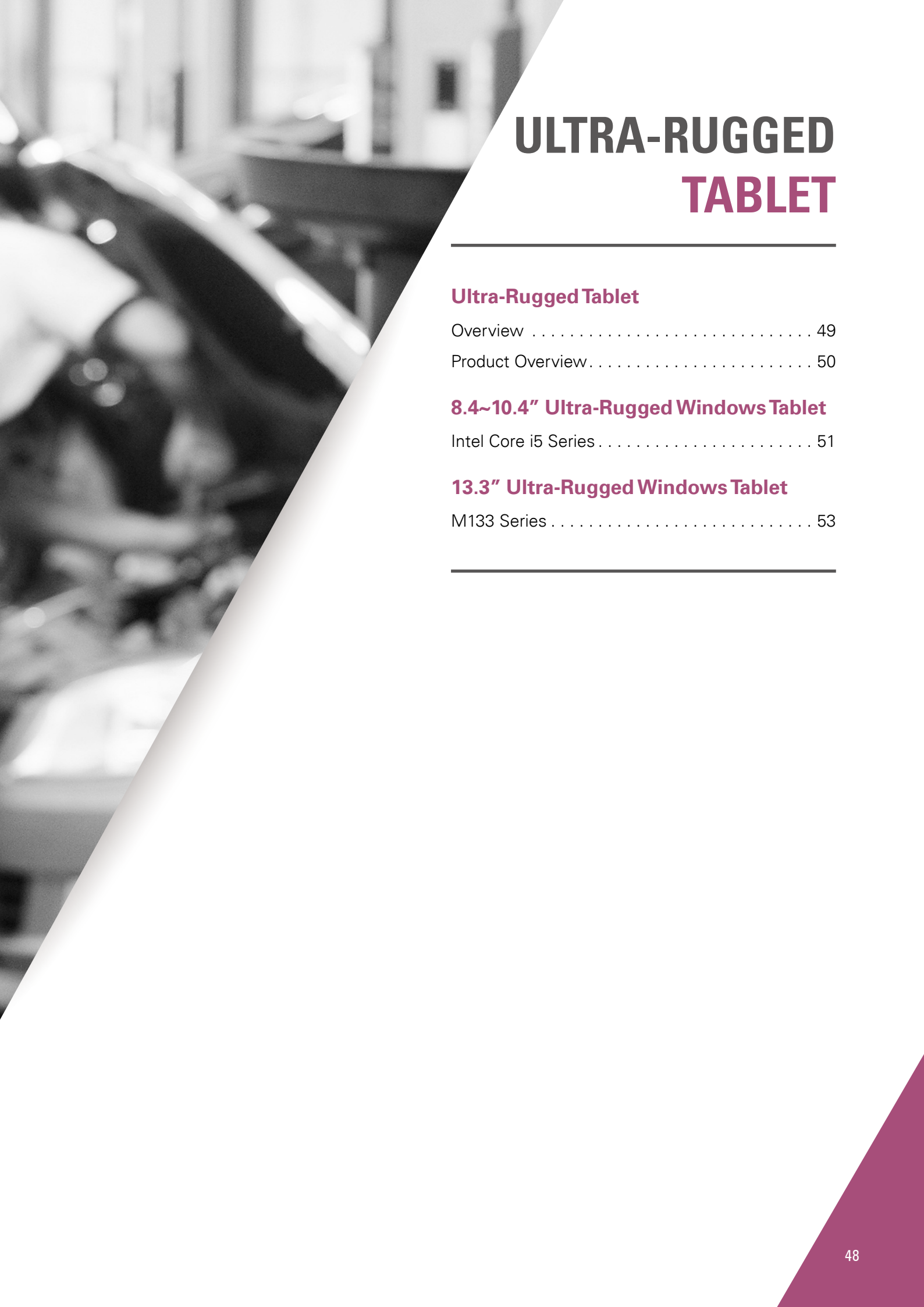
7"

8"

10.1"

3





ULTRA-RUGGED TABLET

Ultra-Rugged Tablet

Overview	49
Product Overview	50

8.4~10.4" Ultra-Rugged Windows Tablet

Intel Core i5 Series	51
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13.3" Ultra-Rugged Windows Tablet

M133 Series	53
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Ultra-Rugged Tablet

Ultra-Rugged Tablet

Overview

With our increased reliance on computers monitoring car sensors and control systems, the entire automotive system must be designed to be safety-critical to ensure the safety of the driver, passengers, pedestrians and other vehicles. To improve the quality and reduce errors in these systems, automotive OEMs and suppliers require good diagnostic tools to detect and discover any faults that appear in automotive systems.

Our ultra-rugged tablets include:

- The latest Windows® operating system
- Robust wireless communications
- Carry-around handle with rubber for easy grip

Winmate ultra-rugged tablets are designed to be carried around workshops and inspection stations with easy grip handles and sturdy kickstands. The large sunlight readable screen helps to ensure the right depiction of every diagram and spreadsheet. With waterproof, dustproof protection and designed to be ultra-reliable, Winmate's ultra-rugged tablets help you finish inspection tasks faster than ever in any condition.



Rugged technology for your vehicle
servicing solution

Product Overview

Winmate ultra-rugged tablets support the latest Windows operating system and come with display sizes ranging from 8.4 up to 13.3 inches. Featuring waterproof, dustproof, vibration and drop resistant enclosures, these tablets are ready to go in the toughest conditions. The handle strap with ribbon provides a sturdy grip and mobility, while the integrated kickstand ensures stability on any surface. If you are operating in demanding environments such as automotive manufacturing and vehicle diagnostics, and looking for the screen size of a laptop in a tablet form factor with increased visibility and powerful computing, then the Winmate ultra-rugged tablet is the top choice for you.

Ultra-Rugged Tablet Comparison Table



Model Name		8.4"	10.4"	8.4"	10.4"	12.1"	13.3"	13.3"
Panel Size		R08IH8M-RTU1GP	R10IH8M-RTT2GP	R08ID8M-RTU1GP	R10ID8M-RTT2GP	R12ID8M-RTM7GP	M133W	M133K
Brightness		600 nits	700 nits	600 nits	700 nits	700 nits	350 nits	350 nits
Touch		Resistive	Resistive	Resistive	Resistive	Resistive	Projected capacitive	Projected capacitive
Processor		Intel® Core™ i5-5250U Broadwell 2.7GHz	Intel® Core™ i5-5250U Broadwell 2.7GHz	Intel Atom® Dual-core N2800 1.86GHz	Intel Atom® Dual-core N2800 1.86GHz	Intel Atom® Dual-core N2800 1.86GHz	Intel® Core™ i5-5250U Broadwell 1.6GHz (Turbo to 2.7GHz)	Intel® Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)
Operating System		Windows 10/ 8.1/ 7	Windows 10/ 8.1/ 7	Windows 7	Windows 7	Windows 7	Windows 10/8.1/7	Windows 10
WWAN	3G	Optional	Optional	Optional	Optional	Optional	Optional	Optional
	4G/ LTE	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Bluetooth 4.0		✓	✓	✓	✓	✓	✓	4.2
Battery		5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	7.4V, 10280 mAh (Typ.) Li-Polymer	7.4V, 10280 mAh (Typ.) Li-Polymer I
Battery Hotswap		X	X	X	X	X	Optional	Optional
IP Rating	IP65	X	Optional	✓	Optional	X	✓	✓
	IP54	✓	✓	✓	✓	✓	X	X

Size

8.4"

10.4"

12.1"

13.3"

8.4~10.4" Ultra-Rugged Windows Tablet

Intel Core i5 Series

Custom configuration

4G
4G/ LTE

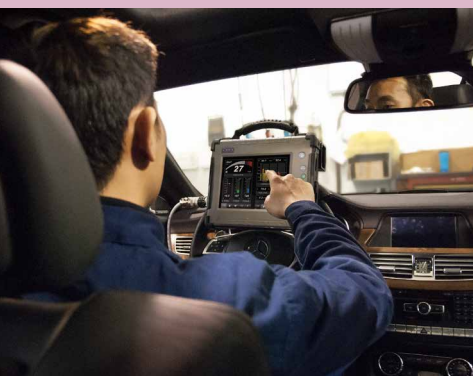
3G
3G


Barcode
Reader



“ **PORTABLE POWERFUL
SOLUTION.** ”

Application



Car Production Testing

“SIMPLIFIES
PRODUCTION PROCESS.”

During the car assembly process operators attach the ultra-rugged tablet to the vehicle to conduct on-board tests with a special steering wheel mount.

- 8.4/10.4" anti-scratch resistive touch screen
- Intel® Core™ i5-5250U Broadwell
- Easy-to-carry handle bar



5MP rear camera

USB 3.0, USB 2.0

HDMI, RS-232, RJ45

Wi-Fi, GPS, Bluetooth 4.0

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Multi-functional
Desktop Docking
Spare Part Battery

Adjustable Kickstand
Shoulder Handle
(Carrying Belt)

Vehicle Mounting
Charger Kit
Soft case

Car Power Charger
Carry Bag
Handstrap

Ultra-Rugged Windows Tablet

Intel® 5th Gen. Core™ i5-5250U

Intel Atom® Dual-core N2800



Model Name	8.4"	10.4"	8.4"	10.4"	12.1"
	R08IH8M-RTU1GP	R10IH8M-RTT2GP	R08ID8M-RTU1GP	R10ID8M-RTT2GP	R12ID8M-RTM7GP
Display					
Resolution	800 x 600	1024 x 768	800 x 600	1024 x 768	1024 x 768
Brightness	600 nits	700 nits	600 nits	700 nits	700 nits
Contrast Ratio	600:1 (Typ.)	1200:1 (Typ.)	600:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)
Touch	Resistive	Resistive	Resistive	Resistive	Resistive
System					
Processor	Intel® 5th Gen. Core™ i5-5250U 2.7GHz	Intel® 5th Gen. Core™ i5-5250U 2.7GHz	Intel Atom® Dual-core N2800 1.86GHz	Intel Atom® Dual-core N2800 1.86GHz	Intel Atom® Dual-core N2800 1.86GHz
Memory	4GB SODIMM DDR3L-1600 (Max 8GB)	4GB SODIMM DDR3L-1600 (Max 8GB)	2GB SODIMM DDR3-1066 (Max 4GB)	2GB SODIMM DDR3-1066 (Max 4GB)	2GB SODIMM DDR3-1066 (Max 4GB)
Storage	64GB mSATA MLC SSD (Max 512GB)	64GB mSATA MLC SSD (Max 512GB)	64GB mSATA SSD (Max. up to 512GB)	64GB mSATA SSD (Max. up to 512GB)	64GB mSATA SSD (Max. up to 512GB)
OS	Windows 10/ 8.1/ 7	Windows 10/ 8.1/ 7	Windows 7	Windows 7	Windows 7
Wireless Communications					
WLAN	802.11 ac/b/g/n 2T2R	802.11 ac/b/g/n 2T2R	802.11 ac/b/g/n 2T2R	802.11 ac/b/g/n 2T2R	802.11 ac/b/g/n 2T2R
Bluetooth	Bluetooth 4.0	Bluetooth 4.0	Bluetooth 4.0	Bluetooth 4.0	Bluetooth 4.0
WWAN	3G, 4G/LTE (Optional)	3G, 4G/LTE (Optional)	3G module (Optional)	3G module (Optional)	3G module (Optional)
GPS	u-Blox Neo-6Q	u-Blox Neo-6Q	u-Blox Neo-6Q	u-Blox Neo-6Q	u-Blox Neo-6Q
Connectors					
Connectors	2 x USB3.0, 1 x Mic in or Line Out, 1 x SD card, 1 x SIM card, 1 x Power Jack, 1 x RS-232/422/485 (Set by jumper), 1 x RJ45	2 x USB3.0, 1 x Mic in or Line Out, 1 x SD card, 1 x SIM card, 1 x Power Jack, 1 x RS-232/422/485 (Set by jumper), 1 x RJ45	2 x USB2.0, 1 x Mic in and Line Out, 1 x SD card, 1 x SIM card, 1 x Power Jack, 1 x RS-232/422/485, 1 x RJ45	2 x USB2.0, 1 x Mic in and Line Out, 1 x SD card, 1 x SIM card, 1 x Power Jack, 1 x RS-232/422/485, 1 x RJ45	2 x USB2.0, 1 x Mic in and Line Out, 1 x SD card, 1 x SIM card, 1 x Power Jack, 1 x RS-232/422/485, 1 x RJ45
Audio					
Speaker	Built-in 1W Speaker	Built-in 1W Speaker	Built-in 1W Speaker	Built-in 1W Speaker	Built-in 1W Speaker
User Controls					
Buttons	1 x Power, 1 x Menu, 3 x Function, 2 x Brightness	1 x Power, 1 x Menu, 3 x Function, 2 x Brightness	1 x Power, 1 x Menu, 3 x Function, 2 x Brightness	1 x Power, 1 x Menu, 3 x Function, 2 x Brightness	1 x Power, 1 x Menu, 3 x Function, 2 x Brightness
LED Indicator	Power, Battery, HDD, RF	Power, Battery, HDD, RF	Power, Battery, HDD, RF	Power, Battery, HDD, RF	Power, Battery, HDD, RF
Mechanical					
Dimensions	266 x 220 x 50.5 mm	266 x 220 x 50.5 mm	266 x 222 x 50 mm	323 x 244 x 53 mm	323 x 244 x 59 mm
Net Weight	2.39kg	2.39 kg	2.0 kg	2.5 kg	3.0 kg
Environment					
Operating Temp.	-20~60°C (AC Mode), -10~50°C (Battery Mode)	-20~60°C (AC Mode), -10~50°C (Battery Mode)	-20~60°C (AC mode), -10~50 (Battery mode)	-20~60°C (AC mode), -10~50°C (Battery mode)	-20~60°C (AC mode), -10~50°C (Battery mode)
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	IP54	IP54 (Optional IP65)	IP54	IP54 (Optional IP65)	IP54
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Power					
Power Input	19V DC	19V DC	19V DC	19V DC	19V DC
Battery	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion	5200 mAh Lithium-Ion
AC Adapter	100~240V, 50-60Hz	100~240V, 50-60Hz	100~240V, 50-60Hz	100~240V, 50-60Hz	100~240V, 50-60Hz
Data Capture					
Barcode	Barcode Resder (Optional)	Barcode Reader (Optional)	Barcode Reader (Optional)	-	-
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Ultra-Rugged Tablet

Size

8.4"

10.4"

12.1"

13.3"

13.3" Ultra-Rugged Windows Tablet M133 Series

Custom configuration



Barcode
Reader



Smart Card
Reader



HF RFID
Reader



4G/ LTE



High
Brightness



Battery
Hotswap



Application



Workshop Diagnostics

"PRODUCTIVE AND
CONVINIENT TO CARRY
AROUND WORKSHOP"

Up-to-date technical service
information, installation
instructions can be retrieved
immediately from the cloud,
always accessible test
procedures.

**" INSPIRED BY CAR MECHANICS.
DESIGNED FOR REPAIR SERVICES. „**

- Large 13.3 inch, 1920 x 1080 sunlight-readable display with optical bonding (Up to 800 nits)
- Intel® Core™ i5 Series CPU
- Windows 10 IoT Enterprise/ Ubuntu 16.04



2MP webcam, 5MP rear camera

Glove/ Rain/ Stylus mode, support active pen

USB 3.0, USB 2.0

HDMI. RS-232,RJ45

Service Window (2 x M.2 SSD and 1 x mini PCIe)

WWAN, GPS, Bluetooth

IP65 waterproof and dustproof

Shock, vibration and drop MIL-STD-810G

-10°C to 50°C operating temperature

Accessories

Standard

Adapter and Power Cord

Stylus

Standard Battery
(M133)

Stand with Integrated
Handle

Optional

Desk Dock
Active Pen

VESA Mounting kit
RAM Mount Kit

VESA Mounting kit 2
Vehicle Charger

Shoulder Strap

Battery Charger

Ultra-Rugged Windows Tablet

Intel® Core™ i5-5200U Broadwell

Intel® Core™ i5-7200U Kaby Lake



Model Name	13.3" M133W	13.3" M133K
Display		
Resolution	1920 x 1080	1920 x 1080
Brightness	350 nits with optical bonding	350 nits with optical bonding, optional high brightness 800 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)
Viewing angle	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)
Sensors	Light sensor, G sensor, Gyro, E-compass	Light sensor, G sensor, Gyro, E-compass
Touch	Projected capacitive with Glove/Rain/Stylus mode	Projected capacitive with Glove/Rain/Stylus mode
System		
Processor	Intel® Core™ i5-5250U Broadwell 1.60 GHz (Turbo to 2.70 GHz)	Intel® Core™ i5-7200U Kaby Lake 2.5 GHz (Turbo up to 3.1 GHz)
Memory	4GB SODIMM DDR3L-1600 (Up to 16GB)	4GB SODIMM DDR3L-1600 (Up to 16GB)
Storage	1 x 128GB M.2 MLC SSD (Up to 1TB with 2 x SSD), 2 x Internal M.2 slots	2 x 128GB M.2 MLC SSD (Up to 512GB)
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7 (WS7P) Windows 7 Pro for Embedded Systems 6	Windows 10 IoT Enterprise
Wireless Communications		
WLAN	Intel® Dual Band Wireless-AC 7265 802.11 a/b/g/n/ac (M.2)	Intel® Dual Band Wireless-AC 8265 802.11 a/b/g/n/ac (M.2)
Bluetooth	Intel® Dual Band Wireless-AC 7265 Bluetooth 4.0 Dual Mode (Classic + Low Energy) (M.2)	Intel® Dual Band Wireless-AC 8265 Bluetooth 4.2 (M.2)
WWAN	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT)	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT)
GPS	u-Blox NEO-6Q	u-blox NEO-M8N (GPS, GLONASS, Galileo, BeiDou)
Connectors	1 x HDMI, 1 x RJ45-10/100/1000 Mbps LAN, 1 x Serial Com Port, 2 x USB 3.0, 2 x USB 2.0, 1 x Headphone Combo, 1x Power (DC in), 1 x Docking, 1 x SD Card Slot, 1 x Service Windows (Access to 2 x M.2 SSD cards and 1 x mini PCI-e WWAN card), 1 x Optional Expansion Window (Smart Card Reader/Barcode)	1 x HDMI, 1 x RS-232, 1 x RJ45-10/100/1000 Mbps LAN, 2 x USB 3.0, 2 x USB 2.0, 1 x USB 3.1 Type-C (Gen1), 1 x Power (DC in), 1 x Micro SD Slot, 1 x Headphone Combo Jack, 1 x Service Windows (Access to 1 x mini PCI-e WWAN card), 1 x Optional Expansion Window (Smart Card Reader/Barcode)
Audio		
Audio	1 x Built-in Digital Mic with Noise Cancellation, 2 x 1W Speaker	1 x Built-in Digital Mic with Noise Cancellation, 2 x 1W Speaker
User Controls		
Buttons	1 x Power, 1 x Menu, 1 x Fn1, 1 x Fn2, 1 x Fn3, 2 x Volume Key (7 membrane keys), 1 x Reset	7 membrane keys: 1 x power, 1 x menu, 3 x function key (Programmable function key)
LED indicator	Power, Battery, RF, SSD	Power, Battery, SSD, RF
Mechanical		
Dimensions	338.2 x 240 x 30 mm (13.3 x 9.4 x 1.18 inches)	338.2 x 240 x 30 mm (13.3 x 9.4 x 1.18 inches)
Net Weight	2.4 Kg (Without Kickstand), 2.8 Kg (With Kickstand)	2.4 Kg (Without Kickstand), 2.8 Kg (With Kickstand)
Environment		
Operating Temp.	-10°C to 50°C	-10°C to 50°C
Humidity	30% to 80% (Non-condensing, RH)	30% to 80% (Non-condensing, RH)
IP Rating	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure	MIL-STD-810G Method 514.6 Procedure
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete	MIL-STD-810G Method 516.6, 4 ft to concrete
Power Requirements		
Power Input	12V DC to 19V DC	12V DC to 19V DC
Battery	7.4V, 10280 mAh (Typ.) Li-Polymer (2S2P), Hot-Swap (Optional)	7.4V, 10280 mAh (Typ.) Li-Polymer (2S2P), Hot-Swap (Optional)
AC Adapter	100~240V, 50-60Hz, 19V DC	100~240V, 50-60Hz, 19V DC
Data Capture		
RFID	HF RFID Reader (ISO15693, ISO14443A, ISO18092)	HF RFID Reader (ISO15693, ISO14443A, ISO18092)
Barcode Reader	1D/2D barcode reader Motorola SE4500	1D/2D barcode reader Motorola SE4500
Smart Card Reader	Built-in smart card reader	Built-in smart card reader
Camera	Rear: 5MP auto-focus camera with LED flash Front: 2MP	Rear: 5MP auto-focus camera with LED flash Front: 2MP
Certification		
Safety	CE, FCC, IC, UL	CE, FCC, IC, UL

Ultra-Rugged Tablet

Size

8.4"

10.4"

12.1"

13.3"

4





VEHICLE MOUNT COMPUTER

Vehicle Mount Computer

Overview	57
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7~10.4" Vehicle Mount Computer

FM Series	59
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Vehicle Mount Computer

Overview

In the warehouse environment, the ability to mount mobile devices and computers to forklifts, trucks, taggers, and inventory pickers is essential for productivity purposes. From inventory management to order fulfillment, asset tracking, shipping and receiving, the warehouse floor is complex ecosystem that requires highly efficiency technology to keep things running smoothly.

Our vehicle mount computers include:

- The latest Android™ or Windows® operating system
- Robust wireless communications
- Vehicle mounting solutions

Winmate's full line of rugged vehicle-mount computers, designed to fit seamlessly into forklifts and other warehouse vehicles will help minimize errors, streamline ordering and inventory management, and improve operational efficiencies.

Size

7"

8"

10.4"



Designed to fit seamlessly into forklifts
and other warehouse vehicles

Product Overview

Winmate offers advanced platform Android and Windows-based vehicle mount computers with application-focused features such as wireless communications, external antennas, wide power input and ignition control.

All the devices are rugged, waterproof and vibration resistant to meet the daily challenges of warehouse operations.

Vehicle Mount Computer Comparison Table



Model Name		FM07	FM08	FM10	FM10A	FM10Q
Panel Size		7"	8"	10.4"	10.4"	10.4"
Brightness		1000 nits	500 nits	400 nits	400 nits	400 nits
Touch		Projected capacitive	Resistive	Resistive	Projected capacitive	Projected capacitive
Processor		Intel® Celeron® N3350	Intel Atom® E3845 Quad-core	Intel Atom® E3845 Quad-core	Freescall™ Arm® Cortex®-A9 i.MX6 Dual Core	Qualcomm® Snapdragon™ 820 Quad-core 2.2GHz
Operating System		Windows 10 IoT Enterprise Ubuntu 16.04	Windows 10 IoT Enterprise / Win 8 / Win 7	Windows 10 IoT Enterprise / Win 8 / Win 7	Android 6.0 Ubuntu 16.04	Android 8.1
WWAN (Optional)	3G	✓	✓	✓	✓	4.2
	4G LTE	✓	✓	✓	✓	✓
Bluetooth 4.0		✓	✓	✓	✓	✓
Battery		N/A	7.4V typ. 3800mAh Li-Polymer Battery	7.4V typ. 3800mAh Li-Polymer Battery	11.1V typ. 2600mAh Li-Polymer Battery	11.1V typ. 2600mAh Li-Polymer Battery
IP		IP65	IP65	IP65	IP65	IP65

Size

7"

8"

10.4"

7~10.4" Vehicle Mount Computer FM Series

Custom configuration



GPS



4G/LTE



3G



External
Antenna



Additional
Storage



Additional
Memory



Application



Intermodal Facility Solution

"IMPROVE OPERATIONAL
EFFICIENCY"

Winmate's VMC solution can be compatible with old peripherals; lock the touch screen and dim the display when the vehicle is moving, easy service and work in the field.

**" FITS SEAMLESSLY INTO
WAREHOUSE VEHICLES. ,,**

- 7~10.4 inch screen
- Intel Atom® Quad-core
- Freescale™ Cortex® Dual-core (FM10A)
- Windows 10 IoT Enterprise
- Android 6.0 (FM10A)



2MP web camera

Bluetooth 4.0, Wi-Fi

RAM mount

Ignition control

Wide power input range

IP65 waterproof and dustproof

Vibration & Shock MIL-STD-810G

Accessories

Standard

Power Cable with Fuse Adapter	USB Cable Power Converter Cable	Wi-Fi Antenna x 2 External Antenna Fixing Bracket	Quick Start Guide	Driver CD
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Optional

DC Power Jack Cable	Adapter	RS-232 Cable	Audio Cable	CANBus Cable
LAN Cable	Key for Vehicle dock	WWAN Antenna x 2	Fuse Kit	No Drill Mounting Kit
Drill Mounting Kit	Keyboard Mounting	UHF Fixed Reader	Antenna	Stylus Kit + Screw

FM Vehicle Mount Computer

Intel® Pentium® N3350



Model Name	7"
	FM07
Display	
Resolution	1024 x 600
Brightness	1000 nits
Contrast Ratio	700:1
Viewing angle	-75~75 (H) ; -70~75 (V)
Touch	Projected capacitive with optional protection glass
System	
Processor	Intel® Pentium® N3350 1.10GHz (Up to 2.4GHz)
Memory	2GB DDR3L 1600 SODIMM (Max. 8 GB)
Storage	64GB M.2 MLC SSD (Up to 256 GB)
OS	Windows 10 IoT Enterprise
Wireless Communications	
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.0
WWAN	Optional LTE : B1/B2/B3/B4/B5/B7/B8/B13/B17/B20 WCDMA/HSDPA/HSUPA/HSPA+ :850 MHz/900 MHz/1700 MHz (AWS)/1900 MHz/ 2100 MHz GPRS/EDGE
GPS	Optional u-Blox Neo-M8N
Connectors	
Computer	1 x RS232 1 x Gigabit Ethernet LAN 10/100/1000 Mbps (M12 type) 1 x Power input 9-36V DC with ignition control 1 x SIM Card Slot 2 x USB 5 x DI 3 x DO 2 x CANBus Wi-Fi Antenna, Bluetooth Antenna, WWAN Antenna (Optional), GPS Antenna (Optional)
Dock	N/A
Mechanical	
Dimensions	188.75 x 144.75 x 39.5 mm (7.43 x 5.70 x 1.56 inches)
Mounting	RAM Mount, VESA Mount (75x75mm)
Net Weight	1.0 kg (2.20 lbs)
Environment	
Operating Temp.	-20°C to 60°C (-4° to 140° F)
Humidity	10% to 95% (Non-condensing, RH)
IP Rating	Front IP65
Shock	Compliant with MIL-STD-810G Method 516.6 Procedure I
Vibration	Compliant with MIL-STD-810G Method 514.6 Procedure I
Power	
Power Input	9-36V DC (M12 type) with ignition control
Battery	N/A
Data Capture	
Camera	N/A
Certifications	
Safety	CE, FCC

Vehicle Mount Computer

Size

7"

8"

10.4"

FM Vehicle Mount Computer

Intel Atom® E3845 Quad-core



Model Name	8"	10.4"
	FM08	FM10
Display		
Resolution	800 x 480	1024 x 768
Brightness	500 nits	400 nits
Contrast Ratio	1100:1	1200:1
Viewing angle	-80~80 (H) ; -80~80 (V)	-88~88 (H) ; -88~88 (V)
Sensors	G-sensor, Light-sensor	G-sensor, Light-sensor
Touch	Anti-scratch resistive, support stylus	Anti-scratch resistive, support stylus
System		
Processor	Intel Atom® E3845 Quad-core 1.91GHz	Intel Atom® E3845 Quad-core 1.91GHz
Memory	4GB SODIMM DDR3L-1600 (Up to 8GB)	4GB SODIMM DDR3L-1600 (Up to 8GB)
Storage	64GB M.2 MLC SSD (Up to 256 GB)	64GB M.2 MLC SSD (Up to 256 GB)
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Professional for Embedded system Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Professional for Embedded system Windows Embedded Standard 7
Wireless Communications		
WLAN	802.11 a/b/g/n/ac	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.0	Bluetooth 4.0
WWAN	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT), Optional 3G (HSPA+, GSM/GPRS/EDGE)	Optional 4G (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT), Optional 3G (HSPA+, GSM/GPRS/EDGE)
GPS	Optional u-blox NEO-6Q (located at the vehicle dock)	Optional u-blox NEO-6Q (located at the vehicle dock)
Connectors		
Computer	1 x SIM Card Slot, 1 x SD Card Slot, 1 x USB 3.0, 1 x 12V DC power input jack	1 x SIM Card Slot, 1 x SD Card Slot, 1 x USB 3.0, 1 x 12V DC power input jack
Dock	1 x COM 1, 1 x COM 2, 1 x USB 2.0 (Support 2 x USB2.0), 1 x CANBUS/AUDIO, 1 x 400Mbps LAN port (Optional PoE, support 802.3at Type 2, 1 x Power, SMA Connector for external antenna (WiFi, Optional GPS, Optional WWAN)	1 x COM 1, 1 x COM 2, 1 x USB 2.0 (Support 2 x USB2.0), 1 x CANBUS/AUDIO, 1 x 400Mbps LAN port (Optional PoE) 802.3at Type 2, 1 x Power, SMA Connector for external antenna (WiFi, Optional GPS, Optional WWAN)
Mechanical		
Dimensions	Computer: 268 x 214 x 32 mm Docking: 202 x 245 x 52 mm	Computer: 268 x 214 x 35 mm Docking: 202 x 245 x 52 mm
Net Weight	Computer 1.6 kg and Docking 1.6 kg	Computer 1.7kg and Docking 1.6kg
Environment		
Operating Temp.	-30°C to 50°C (-22° to 122° F)	-30°C to 50°C (-22° to 122° F)
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
IP Rating	IP65	IP65
Impact	Support EN62262 IK07 rating	Support EN62262 IK07 rating
Shock	Compliant with MIL-STD-810G Method 516.6 Procedure I	Compliant with MIL-STD-810G Method 516.6 Procedure I
Vibration	Compliant with MIL-STD-810G Method 514.6 Procedure I	Compliant with MIL-STD-810G Method 514.6 Procedure I
Power		
Power Input	10V~60V with isolation power and ignition control	10V~60V with isolation power and ignition control
Battery	7.4V typ. 3800mAh Li-Polymer Battery (2S1P)	7.4V typ. 3800mAh Li-Polymer Battery (2S1P)
Data Capture		
Camera	Front: 2MP	Front: 2MP
Certifications		
Safety	CE, FCC, UL60950-1, EN60950-1	CE, FCC, UL60950-1, EN60950-1

FM Vehicle Mount Computer

Freescale™ Cortex® A9 i.MX6 Dual-core



NEW



Q2,2019

Model Name	10.4"	10.4"
	FM10A	FM10Q
Display		
Resolution	1024 x 768	1024 x 768
Brightness	400 nits	400 nits (Optional 1000 nits)
Contrast Ratio	1200:1	1200:1
Viewing angle	-88~88 (H) ; -88~88 (V)	-88~88 (H) ; -88~88 (V)
Sensors	G-sensor, Light-sensor	G-sensor, Light-sensor
Touch	Projected capacitive	Projected capacitive
System		
Processor	Freescale™ Cortex® A9 i.MX6 Dual-core	Qualcomm® Snapdragon™ 820 Quad-core 2.2GHz
Memory	1G LPDDR3	4GB LPDDR3
Storage	16GB eMMC	32GB eMMC
OS	Android 6.0, Android 6.0 Ubuntu 16.04 Kernel 4.1.15	Android 8.1
Wireless Communications		
WLAN	802.11 a/b/g/n	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.0	Bluetooth 4.2
WWAN	Optional 4G (LTE, HSPA+, GSM/GPRS/ EDGE, EV-DO Rev A, 1 x RTT), Optional 3G (HSPA+, GSM/GPRS/EDGE)	Optional 3G/4G LTE (LTE, HSPA+, GSM/GPRS/EDGE, EV-DO Rev A, 1 x RTT)
GPS	u-Blox Neo-6Q on Docking	u-Blox Neo-6Q on Docking
Connectors		
Computer	1 x SIM Card Slot, 1 x Micro SD Card Slot, 1 x USB OTG, 1 x 12V DC in power input jack	1 x SIM Card Slot, 1 x Micro SD Card Slot, 1 x USB 3.0 Type C, 1 x 12V DC in power input jack
Dock	1 x COM 1, 1 x COM 2, 1 x USB 2.0 port (Support 2 x USB2.0), 1 x CAN Bus or 1 x Audio, 1 x 400Mbps LAN port Optional PoE as Power sourcing equipment (PSE) support 802.3at Type 2, 1 x Power Connector SMA Connector for external antenna (WiFi, Optional GPS, Optional WWAN)	1 x COM 1, 1 x COM 2, 1 x USB 2.0 port (Support 2 x USB2.0), 1 x CAN Bus or 1 x Audio, 1 x 400Mbps LAN port Optional PoE as Power sourcing equipment (PSE) support 802.3at Type 2, 1 x Power Connector SMA Connector for external antenna (WiFi, Optional GPS, Optional WWAN)
Mechanical		
Dimensions	Computer: 268 x 214 x 35 mm Docking: 202 x 245 x 52 mm	Computer: 268 x 214 x 35 mm Docking: 202 x 245 x 52 mm
Net Weight	Computer 1.7kg and Docking 1.6kg	Computer 1.7kg and Docking 1.6kg
Environment		
Operating Temp.	AC Mode: -30°C to 50°C (-22°F to 122° F) Battery Mode: 0°C to 50°C (32°F to 122°F)	AC Mode: -30°C to 50°C (-22°F to 122° F) Battery Mode: 0°C to 50°C (32°F to 122°F)
Humidity	5% to 90% (Non-condensing, RH)	5% to 90% (Non-condensing, RH)
IP Rating	IP65	IP65
Impact	Support EN62262 IK07 rating	Support EN62262 IK07 rating
Shock	Compliant with MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I
Vibration	Compliant with MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I
Power		
Power Input	10V~60V with isolation power and ignition control	10V~60V with isolation power and ignition control
Battery	11.1V typ. 2600 mAh Li-Polymer Battery (3S1P)	11.1V typ. 2600 mAh Li-Polymer Battery (3S1P)
Data Capture		
Camera	Front: 2MP	Front: 2MP
Certifications		
Safety	CE, FCC, UL60950-1, EN60950-1	CE, FCC, UL60950-1, EN60950-1

Vehicle Mount Computer

Size

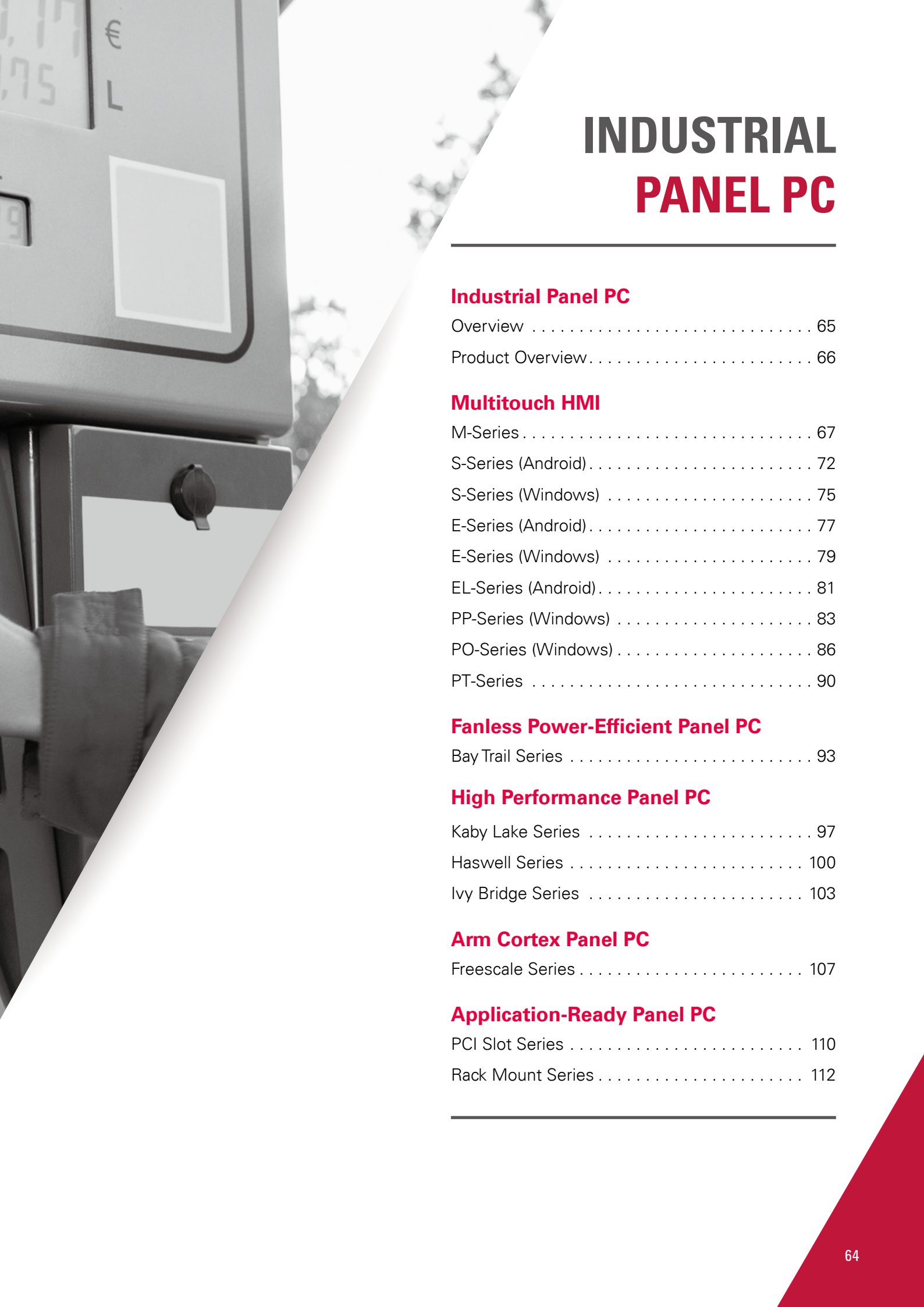
7"

8"

10.4"

5



A background image showing a close-up of an industrial panel PC. The device has a grey casing with a small screen displaying '€' and 'L'. Below the screen is a square button. To the right, a gloved hand is visible, suggesting industrial use. The image is split diagonally, with the top right corner being white and the bottom left corner showing the device and hand.

INDUSTRIAL PANEL PC

Industrial Panel PC

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Multitouch HMI

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Fanless Power-Efficient Panel PC

Bay Trail Series	93
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High Performance Panel PC

Kaby Lake Series	97
Haswell Series	100
Ivy Bridge Series	103

Arm Cortex Panel PC

Freescale Series	107
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Application-Ready Panel PC

PCI Slot Series	110
Rack Mount Series	112

Industrial Panel PC

Overview

As technology evolves and regulatory demands significantly increase, modern factories not only need a way to track processes but also a visualization of each important production step. Numerous data figures collected throughout each shift require a screen to display production status and a dashboard for better control and process optimization. Optimized processes facilitate reduced total cost of ownership, minimize time-to-market and enhance production quality.

Winmate provides a wide range of panel PCs and human-machine interfaces for factory or building automation, machine control, point-of-information kiosks, hospitality, or air traffic control.

Our industrial panel PC include:

- The latest Android™, Windows® or Linux operating system
- Various housing options: panel mount, open frame, chassis
- Durable design

Simply select the optimum display size, choose the processing power and find the right interface to design the most suitable solution for your application.



Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

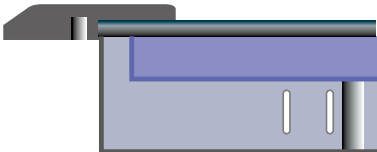
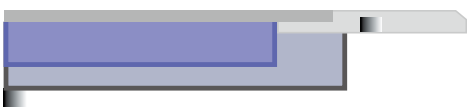
Application-
Ready

Product Overview

Standard Industrial Panel PC

Winmate offers both Android and Windows-based industrial panel PCs that come in different housings and with various processing platforms. Compared to HMI's design that comes with a flat edge-to-edge surface, a standard industrial panel PC comes with a slight bezel.

Standard vs Flat Design

Industrial	Flat
	
Bezel	Edge-to-edge
Single Touch	Multitouch
Chassis, Front IP65, Panel Mount, Open Frame	Chassis, Panel Mount, Open Frame

Human Machine Interfaces (HMI)

Winmate's line of multitouch panel PCs go beyond that of the standard industrial panel computers with elegant and edge-to-edge designs, rugged construction, powerful performance, and flexible mounting options. Whether used for factory or building automation, Human-Machine Interface (HMI), point-of-information kiosks, hospitality, or air traffic control, our products will suit your needs.

Human Machine Interfaces (HMI) Comparison Table



	M Series	S Series	E Series	EL Series	PM Series	OF Series	CH Series
Size	10.4~21.5"	5.6~15.6"	4.3~15.6"	4.3~15.6"	10.4~21.5"	7~23.8"	15~21.5"
OS	Windows	Windows, Android Linux 4.1.15 (QT 5.5)	Windows, Android Linux 4.1.15 (QT 5.5)	Android Linux 4.1.15 (QT 5.5)	Windows	Windows	Windows, Android Linux 4.1.15 (QT 5.5)
PoE	✓	✓	✓	✗	✗	✗	✗
Removable SSD	✓	✗	✗	✗	✗	✗	✗
Webcam	✗	✓	✓	✗	✗	✗	✗
LED Lightbar Indicator	✗	✓	✗	✗	✗	✗	✗
RFID	✓	✓	✗	✗	✗	✗	✗
Wi-Fi	✗	✓	✓	✗	✗	✗	✓

Product

HMI
Panel PC

Fanless

High
PerformanceArm
CortexApplication-
Ready

10.4~21.5" Multitouch HMI M Series

Custom configuration

Up to
16 GB

Memory

Up to
512 GB

Storage

Up to
256 GB

2nd Storage



Application



Outdoor Checkpoint

**"BRIGHT SUNLIGHT
READABLE DISPLAY"**

Total solution for access control with customized enclosure for truck drivers to enter the facility without waiting even in extreme weather conditions and temperature changes.

**“ MODULAR DESIGN.
INCREASED FLEXIBILITY. ”**

- 10.4~21.5-inch screen with P-Cap touch
- Intel® Celeron® N2930 Bay Trail-M CPU
- Intel Atom® E3845 Bay Trail CPU
- Intel® Core™ i5-7200U Kaby Lake CPU
- Windows 7/8/10



Fanless cooling system

One PCIe x4 expansion slot

Two 2.5" SSD bay slots

Touchscreen supports glove mode

Four USB 3.0

HDMI, RS-232, RS-232/422/485, RJ45

Wide range power input 12-24V DC

Wall mount, VESA mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

Mounting Clips

Mounting Screws

AC Adapter

Power Cord

Driver CD

M Series Multitouch HMI

Intel® Core™ i5-7200U



Model Name	12"	15"	17"
	R12IKWS-MHM2	R15IKWS-MHC3	R17IKWS-MHM1
Display			
Resolution	1024 x 768	1024 x 768	1280 x 1024
Brightness	500 nits	250 nits	350 nits
Contrast Ratio	700 : 1 (Typ.)	700 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area	245.76 (H) x 184.32(V)	304.1 (H) x 228.1 (V)	337.9 (H) x 270.3 (V)
Viewing Angle	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)
Display Color	262k/16.2M	262k/16.2M	16.2M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Intel® Core™ i5-7200U; 3M Cache up to 3.1 GHz	Intel® Core™ i5-7200U; 3M Cache up to 3.1 GHz	Intel® Core™ i5-7200U; 3M Cache up to 3.1 GHz
Chipset	Intel® HD graphics 620	Intel® HD graphics 620	Intel® HD graphics 620
Memory	SODIMM DDR4-2133 4GB, option up to 16GB (2 slots)	SODIMM DDR4-2133 4GB, option up to 16GB (2 slots)	SODIMM DDR4-2133 4GB, option up to 16GB (2 slots)
Ethernet	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible
BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS
Audio	Realtek ALC886 codec	Realtek ALC886 codec	Realtek ALC886 codec
Expansion Slot	1 x PCIe x4	1 x PCIe x4	1 x PCIe x4
Storage	Main Storage: default 2.5" 64GB SSD (Optional larger SSD), Second Storage (Optional): internal M.2 64~256GB SSD	Main Storage: default 2.5" 64GB SSD (Optional larger SSD), Second Storage (Optional): internal M.2 64~256GB SSD	Main Storage: default 2.5" 64GB SSD (Optional larger SSD), Second Storage (Optional): internal M.2 64~256GB SSD
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors			
Power	1 x Terminal Block 3pin	1 x Terminal Block 3pin	1 x Terminal Block 3pin
Ethernet	2 x Gigabit LAN	2 x Gigabit LAN	2 x Gigabit LAN
Serial Interface	1 x RS-232/422/485 selectable serial port, 1 x RS-232 serial port	1 x RS-232/422/485 selectable serial port, 1 x RS-232 serial port	1 x RS-232/422/485 selectable serial port, 1 x RS-232 serial port
USB	4 x USB3.0	4 x USB3.0	4 x USB3.0
HDMI	1 x HDMI Output	1 x HDMI Output	1 x HDMI Output
VGA	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output
Audio	1 x Audio IN/OUT Jack	1 x Audio IN/OUT Jack	1 x Audio IN/OUT Jack
User Controls			
Control Buttons	1 x Reset, 1 x Power	1 x Reset, 1 x Power	1 x Reset, 1 x Power
LED Indicators	2 x 2.5" SSD Indicators	2 x 2.5" SSD Indicators	2 x 2.5" SSD Indicators
Power			
Power Input	+12~24V DC in with protection Fuse	+12~24V DC in with protection Fuse	+12~24V DC in with protection Fuse
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	322 x 256 x 91 mm	367 x 291 x 80 mm	398.16 x 335.54 x 94.6 mm
Mouting	Wall Mount, VESA Mount	Wall Mount, VESA Mount	Wall Mount, VESA Mount
Cooling System	Fanless design	Fanless design	Fanless design
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Humidity	30% to 95% (Non-condensing, RH)	30% to 95% (Non-condensing, RH)	30% to 95% (Non-condensing, RH)
IP Rating	Front : IP65, Rear : IP20	Front : IP65, Rear : IP20	Front : IP65, Rear : IP20
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

M Series Multitouch HMI

Intel® Core™ i5-7200U



Industrial Panel PC

Model Name	19"	21.5" (16:9)
	R19IHWS-MHA1	W22IHWS-MHA3
Display		
Resolution	1280 x 1024	1920 x 1080
Brightness	400 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	3000 : 1 (Typ.)
Active Area	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.7M	16.7M
Touch	Projected Capacitive	Projected Capacitive
System		
Processor	Intel® Core™ i5-7200U; 3M Cache up to 3.1 GHz	Intel® Core™ i5-7200U; 3M Cache up to 3.1 GHz
Chipset	Intel® HD graphics 620	Intel® HD graphics 620
Memory	SODIMM DDR4-2133 4GB, option up to 16GB (2 slots)	SODIMM DDR4-2133 4GB, option up to 16GB (2 slots)
Ethernet Controller	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible
BIOS	Insyde BIOS	Insyde BIOS
Audio Codec	Realtek ALC886	Realtek ALC886
Expansion Slot	1 x PCIe x4	1 x PCIe x4
Storage	Main Storage: default 2.5" 64GB SSD (Optional larger SSD), Second Storage (Optional): internal M.2 64~256GB SSD	Main Storage: default 2.5" 64GB SSD (Optional larger SSD), Second Storage (Optional): internal M.2 64~256GB SSD
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors		
Power	1 x Terminal Block 3 pin	1 x Terminal Block 3 pin
Ethernet	2 x Gigabit LAN	2 x Gigabit LAN
Serial Interface	1 x RS-232/422/485 selectable serial port, 1 x RS-232 serial port	1 x RS-232/422/485 selectable serial port, 1 x RS-232 serial port
USB	4 x USB3.0	4 x USB3.0
HDMI	1 x HDMI Output	1 x HDMI Output
VGA	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output
Audio	1 x Audio IN/OUT Jack	1 x Audio IN/OUT Jack
User Controls		
Control Buttons	1 x Reset, 1 x Power	1 x Reset, 1 x Power
LED Indicators	2 x 2.5" SSD Indicators	2 x 2.5" SSD Indicators
Power		
Power Input	+12~24V DC with protection Fuse	+12~24V DC with protection Fuse
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical		
Dimension	445.72 x 370.46 x 94.6 mm	530.5 x 322 x 94.2 mm
Mouting	Wall Mount, VESA Mount	Wall Mount, VESA Mount
Cooling System	Fanless	Fanless
Environment		
Operating Temp.	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C
Humidity	30% to 95% (Non-condensing, RH)	30% to 95% (Non-condensing, RH)
IP Rating	Front: IP65, Rear: IP20	Front: IP65, Rear: IP20
Certifications		
Safety	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

M Series Multitouch HMI

Intel Atom® E3845



Model Name	10.4"	12.1"	15"
	R10IBWS-MHT2	R12IBWS-MHM2	R15IBWS-MHC3
Display			
Resolution	1024 x 768	1024 x 768	1024 x 768
Brightness	350 nits	500 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	700 : 1 (Typ.)	700 : 1 (Typ.)
Active Area	201.4 (H) x 157.8 (V)	245.76 (H) x 184.32 (V)	304.1 (H) x 228.1 (V)
Viewing angle	-88~88 (H) ; -88~88 (V)	-80~80 (H) ; -70~70 (V)	-88~88 (H) ; -88~88 (V)
Display Color	16.2M	262K/16.2M	262K/16.2M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Intel® Celeron® N2930 Bay Trail-M , 1.83GHz	Intel Atom® E3845; 2M Cache up to 1.91 GHz	Intel Atom® E3845 ; 2M Cache up to 1.91 GHz
System Chipset	Intel Atom® SoC Integrated	Intel® HD graphics 4400	Intel® HD graphics 4400
Memory	SODIMM DDR3L-1600 4GB, option up to 8GB (2 slots)	SODIMM DDR3L-1600 4GB, option up to 8GB (2 slots)	SODIMM DDR3L-1600 4GB, option up to 8GB (2 slots)
Ethernet Controller	Dual Intel® 2210AT GbE LAN	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible
BIOS	AMI UEFI BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Audio Codec	Realtek ALC886	Realtek ALC886	Realtek ALC886
Storage	Built-in 64GB mSATA SSD	Main Storage : Default 2.5" 64GB SSD, optional for bigger capacity Second Storage (Optional) : Internal mSATA 64GB~256GB SSD	Main Storage : Default 2.5" 64GB SSD, optional up to 128GB Second Storage (Optional) : internal mSATA 64~256GB SSD
OS	Windows Embedded Standard 7 Windows Embedded 8.1 Standard Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows Embedded 8.1 Standard Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows Embedded 8.1 Standard Windows 10 IoT Enterprise
Connectors			
Power	1 x Terminal Block 3pin	1 x Terminal Block 3pin	1 x Terminal Block 3pin
Ethernet	2 x Gigabite LAN	2 x Gigabite LAN	2 x Gigabite LAN
Serial Interface	1 x COM1/1 x COM2 1 x COM3 (Optional)	1 x RS-232/422/485 selectable serial port	1 x RS-232/422/485 selectable serial port
USB	1 x USB2.0, 1 x USB3.0	4 x USB2.0	4 x USB2.0
HDMI	1 x HDMI Output	1 x HDMI Output	1 x HDMI Output
VGA	-	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output
Audio	-	1 x Audio IN/OUT Jack	1 x Audio IN/OUT Jack
User Controls			
Control Buttons	1 x Reset, 1 x Power	1 x Reset, 1 x Power	1 x Reset, 1 x Power
LED Indicators	1 x storage indicator	1 x 2.5" SSD Indicator	1 x 2.5" SSD Indicator
Power			
Power Input	+9~36V DC	+12~24V DC with protection Fuse	+12~24V DC with protection Fuse
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	269.5 x 226 x 65.3 mm	301.2 x 231.7 x 68.8 mm	367 x 291 x 80 mm
Mouting	Wall Mount, VESA Mount	Wall Mount, VESA Mount	Wall Mount, VESA Mount
Cooling System	Fanless	Fanless	Fanless
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Humidity	30% to 95% (Non-condensing, RH)	30% to 95% (Non-condensing, RH)	30% to 95% (Non-condensing, RH)
IP Rating	Front : IP65, Rear : IP20	Front : IP65, Rear : IP20	Front : IP65, Rear : IP20
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

M Series Multitouch HMI

Intel Atom® E3845



Model Name	17" R17IBWS-MHM1	19" R19IBWS-MHA1	21.5" (16:9) W22IBWS-MHA3
Display			
Resolution	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	350 nits	400 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	1000 : 1 (Typ.)	3000 : 1 (Typ.)
Active Area	337.9 (H) x 270.3 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing angle	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.7M	16.7M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Intel Atom® E3845; 2M Cache up to 1.91 GHz	Intel Atom® E3845; 2M Cache up to 1.91 GHz	Intel Atom® E3845; 2M Cache up to 1.91 GHz
System Chipset	Intel® SoC Intergrated	Intel® SoC Intergrated	Intel® SoC Intergrated
Graphic Chipset	Intel® HD Graphics 4400	Intel® HD Graphics 4400	Intel® HD Graphics 4400
Memory	SODIMM DDR3L-1600 4GB, option up to 8GB (2 slots)	SODIMM DDR3L-1600 4GB, option up to 8GB (2 slots)	SODIMM DDR3L-1600 4GB, option up to 8GB (2 slots)
Ethernet Controller	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible
BIOS	AMI UEFI BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Audio Codec	Realtek ALC886	Realtek ALC886	Realtek ALC886
Storage	Main : default 2.5" 64GB SSD, optional up to 128GB/Second Storage (Optional): internal mSATA 64~256GB SSD	Main : default 2.5" 64GB SSD, optional up to 128GB/Second Storage (Optional): internal mSATA 64~256GB SSD	Main : default 2.5" 64GB SSD, optional up to 128GB/Second Storage (Optional): internal mSATA 64~256GB SSD
OS	Windows Embedded Standard 7 Windows Embedded 8.1 Standard Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows Embedded 8.1 Standard Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows Embedded 8.1 Standard Windows 10 IoT Enterprise
Connectors			
Power	1 x Terminal Block 3pin	1 x Terminal Block 3pin	1 x Terminal Block 3pin
Ethernet	2 x Gigabite LAN	2 x Gigabite LAN	2 x Gigabite LAN
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
USB	4 x USB2.0	4 x USB2.0	4 x USB2.0
HDMI	1 x HDMI Output	1 x HDMI Output	1 x HDMI Output
VGA	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output
Audio	1 x Audio IN/OUT Jack	1 x Audio IN/OUT Jack	1 x Audio IN/OUT Jack
User Controls			
Control Buttons	1 x Reset, 1 x Power	1 x Reset, 1 x Power	1 x Reset, 1 x Power
LED Indicators	1 x 2.5" SSD Indicator	1 x 2.5" SSD Indicator	1 x 2.5" SSD Indicator
Power			
Power Input	+12~24V DC with protection Fuse	+12~24V DC with protection Fuse	+12~24V DC with protection Fuse
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	398.16 x 330.54 x 79.6 mm	445.72 x 370.46 x 79.6 mm	530.5 x 322 x 45.2 mm
Mouting	Wall Mount/VESA Mount	Wall Mount/VESA Mount	Wall Mount/VESA Mount
Cooling System	Fanless design	Fanless design	Fanless design
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Humidity	30% to 95% at 40°C (Non-condensing, RH)	30% to 95% at 40°C (Non-condensing, RH)	30% to 95% at 40°C (Non-condensing, RH)
IP Rating	Front : IP65, Rear : IP20	Front : IP65, Rear : IP20	Front : IP65, Rear : IP20
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

5~15" Android Multitouch HMI S Series



“ **KNOW-HOW IN POE AND TOUCH TECHNOLOGY.** ”

- 5~15-inch screen with P-Cap touch
- Freescale™ Arm® Cortex®-A9 i.MX6
- Android 6.0, Ubuntu 16.04



Fanless cooling system

16 GB eMMC, micro SD card

Power over Ethernet (PoE)

USB 2.0 host, USB OTG

RS-232/422/485, RJ45 (PoE), CANBus

1W Speaker

Panel mount, VESA mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

VESA Plate	VESA Screws	AC Adapter	Power Cord	Driver CD
VESA Desk Stand	VESA Wall Mount Bracket			

Custom configuration



Memory



Status Light Bar



2MP Webcam



HR RFID Reader

Application



Meeting Room Booking System

“OPTIMIZE MEETING ROOM UTILIZATION.”

Installed at the entrance of a meeting room, the 10.1-inch S-Series HMI with HF RFID reader helps control access to the meeting room, booking schedule and booking status from afar.

S Series Android Multitouch HMI

TI Arm® Cortex®-A8 AM3354

Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core

Industrial Panel PC



Model Name	5" (5:3) W05TA3S-PCT3AC	7" (17:10) W07FA3S-PCO1AC-POE	7" (17:10) W07FA3S-PCO1-POE
Display			
Resolution	800 x 480	1024 x 600	1024 x 600
Brightness	300 nits	1000 nits	1000 nits
Contrast Ratio	500 : 1 (Typ.)	700 : 1 (Typ.)	700 : 1 (Typ.)
Active Area	0.045 (H) X 0.135 (V)	153.6 (W) x 90.0 (H)	153.6 (W) x 90.0 (H)
Viewing Angle	-70~70 (H); -50~70 (V)	-75~75 (H); -75~70 (V)	-88~88 (H); -88~88 (V)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	TI Arm® Cortex®-A8 AM3354 1GHz with DSP	Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core 1GHz (Optional Quad-core)	Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core 1GHz (Optional Quad-core)
Memory	512MB DDR2 SDRAM 533MHz	1GB LPDDR3 (Optional 2GB LPDDR3)	1GB LPDDR3 (Optional 2GB LPDDR3)
Ethernet Controller	-	Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780 GbE
Storage	-	16 GB eMMC (Default), mSATA, Micro SD card	16 GB eMMC (Default), mSATA, Micro SD card
OS	Android 4.4 (Default)	Android 6.0 (Default) Ubuntu 16.04 Linux Kernel 4.1.15, QT 5.5	Android 6.0 (Default) Ubuntu 16.04 Linux Kernel 4.1.15, QT 5.5
Connectors			
Power	1 x Phoenix type Power Jack	1 x Phoenix type Power Jack	1 x Phoenix type Power Jack
Ethernet	1 x RJ 45 10/100/1000 (Support PoE standards IEEE 802.3at for up to 25 Watt)	1 x RJ45 10/100/1000 Mbps (LAN support PoE function)	1 x RJ45 10/100/1000 Mbps (LAN support PoE function)
SD Card	1 x Micro SD Card Slot (Compatible with SDHC)	1 x Micro SD Card Slot	1 x Micro SD Card Slot
DIDO	1 x DIDO 2 in/2 out (One 12V/1A for electromagnetic lock)	-	-
Audio	1 x Optional 1 Watt Speaker 1 x Optional MIC (Uni-directional)	1 x 1 Watt Speaker	1 x 1 Watt Speaker
LED Light Bar	1 x LED Light Bar	1 x Built-in RGB LED light bar	NA
Control Buttons	1 x Reset with Blue LED indicator	1 x Reset	1 x Reset
Power			
Power Input	+12V DC	+9~24V DC	+9~24V DC
Power Consumption	10W (Without DIDO Device)	10W	10W
Power over Ethernet	IEEE 802.3at for up to 25 Watt	IEEE 802.3at for up to 25 Watt	IEEE 802.3at for up to 25 Watt
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	138 x 138 x 29 mm	189.4 x 145.4 x 36.1 mm	189.4 x 145.4 x 36.1 mm
Mouting	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm
Cooling System	Fanless design	Fanless design	Fanless design
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	Front : IP65, Full : IP22	Front : IP65, Full : IP22	Front : IP65, Full : IP22
Data Capture			
RFID/NFC Reader	Support 14443A, ISO 15693/ISO18092, 3cm (Maximum Reading Range)	HF RFID Reader 13.56MHz (Optional)	HF RFID Reader 13.56MHz (Optional)
Camera	2MP front camera	2MP front camera (Optional)	2MP front camera (Optional)
RF Remote Control	443MHz RF module with controller, 10M (Maximum Active Range)	-	-
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

S Series Android Multitouch HMI

Freescall[®] Arm[®] Cortex[®]-A9 i.MX6 Dual-core



Model Name	10.1" (16:10) W10FA3S-PCH2AC-PoE	10.1" (16:10) W10FA3S-PCH2-POE	15" R15FA3S-PCC3-PoE
Display			
Resolution	1280 x 800	1280 x 800	1024 x 768
Brightness	350 nits	350 nits	250 nits
Contrast Ratio	800 : 1 (Typ.)	800 : 1 (Typ.)	700 : 1 (Typ.)
Active Area	216.96 (H) x 125.6 (V)	216.96 (H) x 135.6 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)	-88~88 (H); -88~88 (V)
Display Color	16.7M	16.7M	16.7M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Freescall [™] Arm [®] Cortex [®] -A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)	Freescall [™] Arm [®] Cortex [®] -A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)	Freescall [™] Arm [®] Cortex [®] -A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)
Memory	1GB LPDDR3 (Optional 2GB LPDDR3)	1GB LPDDR3 (Optional 2GB LPDDR3)	1GB LPDDR3 (Optional 2GB LPDDR3)
Storage	16 GB eMMC (Default), mSATA/ Micro SD card	16 GB eMMC (Default), mSATA/ Micro SD card	16 GB eMMC (Default), mSATA/ Micro SD card
OS	Android 6.0 (Default) Ubuntu 16.04 Linux Kernel 4.1.15, QT 5.5 Browser	Android 6.0 (Default) Ubuntu 16.04 Linux Kernel 4.1.15, QT 5.5 Browser	Android 6.0 (Default) Ubuntu 16.04 Linux Kernel 4.1.15, QT 5.5 Browser
Connectors			
Power	1 x Phoenix type Terminal Block	1 x Phoenix type Terminal Block	1 x Phoenix type Terminal Block
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
USB	1 x USB 2.0, 1 x Micro USB OTG	1 x USB 2.0, 1 x Micro USB OTG	1 x USB 2.0, 1 x Micro USB OTG
SD Card	1 x Micro SD	1 x Micro SD	1 x Micro SD
CANBus	1 x CANBus	1 x CANBus	1 x CANBus
LED Light Bar	1 x Built-in RGB LED light bar	-	-
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Consumption	12W	12W	19W
Power over Ethernet	IEEE 802.3at for up to 25 Watt	IEEE 802.3at for up to 25 Watt	EEE 802.3at for up to 25 Watt
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	263.28 x 171 x 35.7 mm	263.28 x 171 x 35.7 mm	363.40 x 277.86 x 44.50 mm
Mouting	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm	VESA Mount, 100 x 100 mm
Cooling System	Fanless design	Fanless design	-
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-	-	-30 °C to 70 °C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	Front : IP65, Full : IP22	Front : IP65, Full : IP22	Front : IP65, Full : IP22
Options			
RFID/NFC Reader	Optional NFC Reader: Peer-to-peer, Full ISO 18092 (Up to 424 Kbits/s) Reader/Writer, ISO 14443-A, MIFARE, FeliCa NFC Forum tags, ISO 15693	Optional NFC Reader: Peer-to-peer, Full ISO 18092 (Up to 424 Kbits/s) Reader/Writer, ISO 14443-A, MIFARE, FeliCa NFC Forum tags, ISO 15693	Optional NFC Reader: Peer-to-peer, Full ISO 18092 (Up to 424 Kbits/s) Reader/Writer, ISO 14443-A, MIFARE, FeliCa NFC Forum tags, ISO 15693
Camera	2MP front camera (Optional)	2MP front camera (Optional)	2MP front camera (Optional)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

7~15" Windows Multitouch HMI S Series

Custom configuration



Memory



Status Light Bar



2MP Webcam



HR RFID Reader



Application



Machine Controller

"EASY TO MAINTAIN & COST EFFECTIVE."

Installed in the packaging zone of a food processing manufacturer, the S-Series operator HMI allows for automation and visualization for the packaging line.

“ SMART SOLUTION FOR
AUTOMATED PACKAGING. „

- 7~15-inch screen with P-Cap touch
- Intel® Celeron® N2930 Bay Trail-M
- Windows 7/8/10



Fanless cooling system

64GB M.2 SSD

Power over Ethernet (PoE)

USB 3.0, USB 2.0

RS-232/422/485, RJ45, RJ45 (PoE)

1W Speaker

Panel mount, VESA mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

VESA Plate

VESA Screws

AC Adapter

Power Cord

Driver CD

VESA Desk Stand

VESA Wall Mount Bracket

S Series Windows Multitouch HMI

Intel® Celeron® N2930 Bay Trail-M



Model Name	7" (17:10) W07IB3S-PCO1-PoE	7" (17:10) W07IB3S-PCO1AC-PoE	10.1" (16:10) W10IB3S-PCH2AC-PoE	10.1" (16:10) W10IB3S-PCH2-PoE	15" R15IB3S-PCC3-PoE
Display					
Resolution	1024 x 600	1024 x 600	1280 x 800	1280 x 800	1024 x 768
Brightness	900 nits	900 nits	350 nits	350 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	1000 : 1 (Typ.)	800 : 1 (Typ.)	800 : 1 (Typ.)	700 : 1 (Typ.)
Active Area	153.6 (W) x 90.0 (H)	153.6 (W) x 90.0 (H)	216.96 (H) x 135.6 (V)	216.96 (H) x 135.6 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-75~75 (H); -75~70 (V)	-75~75 (H); -75~70 (V)	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)	-88~88 (H); -88~88 (V)
Display Color	16.2M	16.2M	16.7M	16.7M	16.2M/262k
Touch	Projected Capacitive	Projected Capacitive	Projective Capacitive	Projected Capacitive	Projected Capacitive
System					
Processor	Intel® Celeron® N2930, 1.83GHz	Intel® Celeron® N2930, 1.83GHz	Intel® Celeron® N2930, 1.83GHz	Intel® Celeron® N2930, 1.83GHz	Intel® Celeron® N2930, 1.83GHz
Chipset	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC
Memory	1 x SODIMM DDR3L 1600 MHz (Default 2GB, Max 8GB)	1 x SODIMM DDR3L 1600 MHz (Default 2GB, Max 8GB)	1 x SODIMM DDR3L 1600 MHz (Default 2GB, max. 8GB)	1 x SODIMM DDR3L 1600 MHz (Default 2GB, max. 8GB)	1 x SODIMM DDR3L 1600 MHz (Default 2GB, max. 8GB)
Ethernet Controller	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN
BIOS	AMI 64Mbit Flash	AMI 64M bit Flash	AMI 64M bit Flash	AMI 64M bit Flash	AMI 64M bit Flash
Storage	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD
OS	Windows 10 IoT / Windows Embedded 8.1 Industry Pro / Windows Embedded Standard 7 – WS7P	Windows 10 IoT / Windows Embedded 8.1 Industry Pro / Windows Embedded Standard 7 – WS7P	Windows 10 IoT / Windows/Embedded 8.1 Industry Pro / Windows Embedded Standard 7 – WS7P	Windows 10 IoT / Windows Embedded 8.1 Industry Pro / Windows Embedded Standard 7 – WS7P	Windows 10 IoT / Windows Embedded 8.1 Industry Pro / Windows Embedded Standard 7 – WS7P
Connectors					
Power	1 x 3pin Terminal Block (Phoenix Type)	1 x 3pin Terminal Block (Phoenix Type)	1 x 3pin Terminal Block (Phoenix Type)	1 x 3pin Terminal Block (Phoenix Type)	1 x 3pin Terminal Block (Phoenix Type)
Ethernet	2 x RJ 45 LAN, 1 x LAN/PoE	2 x RJ 45 LAN, 1 x LAN/PoE	2 x RJ 45 LAN, 1 x LAN/PoE	2 x RJ 45 LAN, 1 x LAN/PoE	2 x RJ 45 LAN, 1 x LAN/PoE
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485
USB	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
Audio	1 x 1 Watt speaker	1 x 1 Watt speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	2 x 2W Speaker
User Controls					
LED Light Bar	-	1 x LED Light Bar	1 x LED Light Bar	-	-
Mechanical					
Dimension	189.4 x 145.4 x 37.7 mm	189.4 x 145.4 x 37.7 mm	263.28 x 171 x 35.7 mm	263.28 x 171 x 35.7 mm	363.4 x 277.8 x 44.5 mm
Mouting	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm	VESA Mount, 75 x 75 mm
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design	Fanless design
Environment					
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	-10°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
IP Rating	Front : IP65, Full : IP22	Front : IP65, Full : IP22	Front : IP65, Full : IP22	Front : IP65, Full : IP22	Front : IP65, Full : IP22
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	19W	19W	19W	19W	23W
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Data Capture					
RFID Reader	HF RFID Reader 13.56 MHz (Optional)	HF RFID Reader 13.56 MHz (Optional)	HF RFID Reader 13.56 MHz (Optional)	HF RFID Reader 13.56 MHz (Optional)	HF RFID Reader 13.56 MHz (Optional)
Camera	2MP Front Camera (Optional)	2MP Front Camera (Optional)	2MP Front Camera (Optional)	2MP Front Camera (Optional)	2MP Front Camera (Optional)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

7~15.6" Android Multitouch HMI E Series

Custom configuration



PoE

Application



Energy Efficiency Systems

"EASE OF USE,
DURABILITY AND
ACCURATE CONTROLS."

Lower operational costs with HMI operator panels installed inside intelligent building to control energy consumption.



**“ EASY TO INSTALL.
ERGONOMIC. COMPACT. ”**

- 7~15.6-inch screen with P-Cap touch
- Freescale™ Arm® Cortex®-A9 i.MX6
- Android 6.0, Ubuntu 16.04,
Linux Kernel 4.1.15, QT 5.5



Fanless cooling system

1 GB LPDDR3, 16 GB eMMC, micro SD card

USB 2.0 host, USB OTG, micro USB for debug

RS-232/422/485, RJ45 (PoE), CANBus, micro HDMI

Panel mount, VESA mount

Front IP65

-10°C to 50°C operating temperature

For less I/O demanding applications

Accessories

Standard

Mounting Clips and Screws

2 pin Terminal Block

AC Adapter

Power Cord

Driver CD

E Series Android Multitouch HMI

Freescall™ Arm® Cortex®-A9 i.MX6



Model Name	7" (17:10) W07FA3S-EHT1	10.1" (16:10) W10FA3S-EHH2	15.1" R15FA3S-EHC3	15.6" (16:9) W15FA3S-EHA4
Display				
Resolution	1024 x 600	1280 x 800	1024 x 768	1920 x 1080
Brightness	320 nits	300 nits	250 nits	300 nits
Contrast Ratio	500 : 1 (Typ.)	800 : 1 (Typ.)	700:1 (Typ.)	500 : 1 (Typ.)
Viewing Angle	-70~70 (H); -50~60 (V)	-70~70 (H); -50~60 (V)	-80~80 (H); -80~80 (V)	-85~85 (H); -85~85 (V)
Display Color	16.7M (8bit)	16.7M (8bit)	16.7M (8bit)	262K (68bit)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System				
Processor	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz
Memory	1GB LPDDR3	1GB LPDDR3	1GB LPDDR3	1GB LPDDR3
Storage	Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card
OS	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Linux Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Linux Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Linux Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Linux Ubuntu 16.04 (Optional)
Connectors				
Power	1 x 2pin terminal block	1 x 2pin terminal block	1 x 2pin terminal block	1 x 2pin terminal block
Ethernet	1 x RJ45 10/100/1000 LAN Support PoE function	1 x RJ45 10/100/1000 LAN Support PoE function	1 x RJ45 10/100/1000 LAN Support PoE function	1 x RJ45 10/100/1000 LAN Support PoE function
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
USB	1 x USB 2.0 host, 1 x USB OTG	1 x USB 2.0 host, 1 x USB OTG	1 x USB 2.0 host, 1 x USB OTG	1 x USB 2.0 Host, 1 x USB OTG
Memory Card	1 x Micro SD Card Slot	1 x Micro SD Card Slot	1 x Micro SD Card Slot	1 x Micro SD Card Slot
CAN BUS	1 x CANBUS	1 x CANBUS	1 x CANBUS	1 x CANBUS
HDMI	1 x Micro HDMI	1 x Micro HDMI	1 x Micro HDMI	1 x Micro HDMI
Debug	1 x Mini USB to Debug	1 x Mini USB to Debug	1 x Mini USB to Debug	1 x Mini USB to Debug
Power				
Power Input	+9~24V DC	+12V DC	+12V DC	+12V DC
Power over Ethernet	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical				
Dimension	184.94 x 127.7 x 44.9 mm	267.42 x 182.14 x 57.6 mm	276.7 x 352.5 x 56.3 mm	421 x 260.6 x 65.5 mm
Mouting	VESA Mount, 75 x 75 mm, 4 x Mounting Clips	8 x Mounting Clips	10 x Mounting Clips	10 x Mounting Clips
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design
Environment				
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	Front: IP65, Rear: IP22	Front: IP65, Rear: IP22	Front: IP65, Rear: IP22	Front: IP65, Rear: IP22
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

7~15.6" Windows Multitouch HMI E Series

Custom configuration



Memory



Application



Fruit Sorting and Packaging

“FAST SPEED AND STABLE PERFORMANCE.”

The multitouch panel PC offered advanced performance with an intuitive user interface.

Being connected to a PLC through an Ethernet cable allowed the operations panel PC to ensure faster and more reliable communication.

“**ELEGANT DESIGN.**”

- 7~15.6-inch screen with P-Cap touch
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/8/7



Fanless cooling system

64 GB mSATA SSD

USB 3.0, USB 2.0

RS-232/422/485, two RJ45, HDMI 1.4a

Panel mount, VESA mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

Mounting Clips and Screws

2 pin Terminal Block

AC Adapter

Power Cord

Driver CD

E Series Windows Multitouch HMI

Intel® Celeron® N2930 Bay Trail-M



Model Name	7" (17:10)	10.1" (16:10)	15.1"	15.6" (16:9)
	W07IB3S-EHT1	W10IB3S-EHH2	R15IB3S-EHC3	W15IB3S-EHA2
Display				
Resolution	1024 x 600	1280 x 800	1024 x 768	1920 x 1080
Brightness	320 nits	350 nits	250 nits	300 nits
Contrast Ratio	500 : 1 (Typ.)	800 : 1 (Typ.)	700:1 (Typ.)	500 : 1 (Typ.)
Viewing Angle	-70~70 (H); -50~60 (V)	-85~85 (H); -85~85 (V)	-80~80 (H); -80~80 (V)	-85~85 (H); -85~85 (V)
Display Color	16.7M (8bit)	16.7M (8bit)	16.7M (8bit)	262K (6bit)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System				
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz
Chipset	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated
Memory	2GB DDR3L 1066/1333 SO-DIMM (Optional 4 GB)	2GB DDR3L 1066/1333 SO-DIMM (Optional 4 GB)	2GB DDR3L 1066/1333 SO-DIMM (Optional 4 GB)	2GB DDR3L 1066/1333 SO-DIMM (Optional 4 GB)
Storage	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD
OS	Windows 10 IoT / Windows Embedded 8.1 Ind./Windows Embedded 8 Standard/Windows Embedded Standard 7	Windows 10 IoT/ Windows Embedded 8.1 Ind./Windows Embedded 8 Standard/ Windows Embedded Standard 7	Windows 10 IoT/ Windows Embedded 8.1 Ind./Windows Embedded 8 Standard/Windows Embedded Standard 7	Windows 10 IoT/ Windows Embedded 8.1 Ind./Windows Embedded 8 Standard/Windows Embedded Standard 7
Security	Trusted platform module (TPM 1.2)	Trusted platform module (TPM 1.2)	Trusted platform module (TPM 1.2)	Trusted platform module (TPM 1.2)
Utility	Watchdog SDK	Watchdog SDK	Watchdog SDK	Watchdog SDK
Connectors				
Power	1 x DC Jack	1 x DC Jack	1 x DC Jack	1 x DC Jack
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
USB	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0
Ethernet	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
HDMI port	1 x HDMI1.4a	1 x HDMI1.4a	1 x HDMI 1.4a	1 x HDMI1.4a
Power				
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	17 W (Typ.)	19 W (Typ.)	23 W (Typ.)	23 W (Typ.)
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical				
Dimension	184.94 x 127.7 x 44.9 mm	267.42 x 182.14 x 57.6 mm	276.7 x 352.5 x 56.3 mm	421 x 260.6 x 65.5 mm
Mouting	VESA Mount, 75 x 75 mm, Panel Mount with 4 Mounting Clips	Panel Mount with 8 Mounting Clips	Panel Mount with 10 Mounting Clips	Panel Mount with 10 Mounting Clips
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design
Environment				
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	Front: IP65, Rear: IP22	Front: IP65, Rear: IP22	Front: IP65, Rear: IP22	Front: IP65, Rear: IP22
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

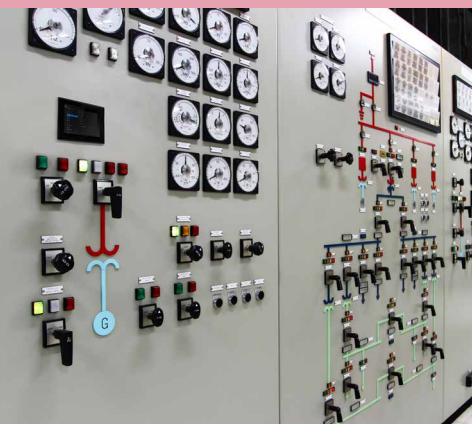
4.3~15.6" Android Multitouch HMI EL Series

Custom configuration

NA



Application



Utilities Control

"JUST THE RIGHT SIZE
FOR OUR APPLICATION."

The ultra-compact HMI with a 4.3-inch multitouch screen makes this solution the right fit for machine control and data visualization on the factory floor.

“ **PANEL MOUNT.
FITS IN CONFINED SPACES.** ”

- 4.3~15.6-inch screen with P-Cap touch
- Freescale™ Arm® Cortex®-A9 i.MX6
- Android 6.0, Ubuntu 16.04



Fanless cooling system

1 GB LPDDR3, 8 GB eMMC

USB 2.0 host, USB OTG

RS-485, RJ45

Panel mount, VESA mount

Front IP65, -20°C to 50°C operating temperature

Accessories

Standard

VESA Plate
VESA Desk Stand

VESA Mounting Screws
VESA Wall Mount Bracket

AC Adapter

Power Cord

Driver CD

EL Series Android Multitouch HMI

Freescall™ Arm® Cortex®-A9 i.MX6



Model Name	4.3" (16:9)	5.6" (17:10)	7" (17:10)	10.1" (16:10)	15.6" (16:9)
	W04FA3S-ELT1	W05FA3S-ELT1	W07FA3S-ELT1	W10FA3S-ELH2	W15FA3S-ELA4
Display					
Resolution	480 x 272	1024 x 600	1024 x 600	1280 x 800	1920 x 1080
Brightness	400 nits	300 nits	320 nits	350 nits	300 nits
Contrast Ratio	1000 : 1 (Typ.)	400 : 1 (Typ.)	500 : 1 (Typ.)	800 : 1 (Typ.)	800 : 1 (Typ.)
Viewing Angle	-75~50 (H); -75~75 (V)	-75~50 (H); -75~75 (V)	-75~70 (H); -75~75 (V)	-85~85 (H); -85~85 (V)	-85~85 (H); -85~85 (V)
Display Color	16.7M (8bit)	256k (6bit)	16.7M (8bit)	16.7M (8bit)	262k (8 bit)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System					
Processor	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core 1GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1 GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz
Memory	1GB LPDDR3	1GB LPDDR3	1 GB LPDDR3	1GB LPDDR3	1GB LPDDR3
Storage	Onboard 8GB eMMC	Onboard 8GB eMMC	Onboard 8 GB eMMC	Onboard 8 GB eMMC	Onboard 8 GB eMMC
OS	Android 6.0 (Default) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Ubuntu 16.04 (Optional)
Connectors					
DC-Input	Terminal Block 3 Pin	Terminal Block 3 Pin	Terminal Block 3 Pin	Terminal Block 3 Pin	Terminal Block 3 Pin
USB Port	1 x USB 2.0 host, 1 x Micro USB OTG	1 x USB 2.0 host, 1 x Micro USB OTG	1 x USB 2.0 host, 1 x Micro USB OTG	1 x USB 2.0 host, 1 x Micro USB OTG	1 x USB 2.0 host, 1 x USB OTG
Ethernet	1 x RJ45, 10/100/1000	1 x RJ45, 10/100/1000	1 x RJ45, 10/100/1000	1 x RJ45, 10/100/1000	1 x RJ45, 10/100/1000
COM Port	1 x RS-485	1 x RS-485	1 x RS-485	1 x RS-485	1 x RS-485
Power					
Power Input	+12~24V DC with isolation	+12~ 24V DC in with isolation	+12~24V DC with isolation	+12~24V DC with isolation	+12~24V DC with isolation
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical					
Dimension	121 x 82 x 49 mm	158 x 116 x 51 mm	185 x 128 x 46 mm	267 x 182 x 47 mm	444 x 285 x 27.5 mm
Mouting	Mounting clips x 4	Mounting clips x 6	Mounting clips x 7	Mounting clips x 7	Mounting Clips x 10
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design	Fanless design
Environment					
Operating Temp.	-20°C to 50°C	0°C to 50°C	-20°C to 50°C	-20°C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating	Front IP65	IP65	Front IP65	Front IP65	Front IP65
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

10.4~21.5" Windows Multitouch HMI PP Series

Custom configuration



Memory



Storage



Application



Operator Control & Monitoring

"VIVID GRAPHICS
AND USER-FRIENDLY
CONTROLS."

Accurate machine control and monitoring with vivid images depicted on a 21.5-inch screen with crystal clear resolution for more complex graphics inside smart factory.

“ **HIGH COMPUTING
PERFORMANCE.
PANEL MOUNT.** ”

- 10.4~21.5-inch screen with P-Cap touch
- Intel® Core™ i5-7200U CPU
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/8/7



Fanless cooling system

Brightness adjustment knob

Two USB 3.0

RS-232, RS-232/422/485, two RJ45, HDMI 1.4

Panel mount, VESA mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

PP Series Windows Multitouch HMI

Intel® Celeron® N2930 Bay Trail-M



Model Name	10.4"	15"	15.5" (16:9)	19"	21.5" (16:9)
	R10IB3S-PPT2	R15IB7T-PPC3	W15IB7T-PPA4	R19IB7T-PPM1	W22IB7T-PPA3
Display					
Resolution	1024 x 768	1024 x 768	1920 x 1080	1280x1024	1920 x 1080
Brightness	350 nits	250 nits	300 nits	250 nits	250 nits
Contrast Ratio	1200 : 1 (Typ.)	700 : 1 (Typ.)	800 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)
Viewing Angle	-88~88 (H); -88~88 (V)	-70~70 (H); -60~60 (V)	-85~85 (H); -85~85 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.2M	16.7M (6bits/color)	16.7M (8bits/colors)	16.7M (8bits/color)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System					
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® Celeron® N2930 Bay Trial-M, 1.83GHz	Intel® Celeron® N2930 Bay Trial-M, 1.83GHz	Intel® Celeron® N2930 Bay Trial-M, 1.83 GHz
Chipset	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC
Memory	SODIMM DDR3L 1600/1333, max. 8GB	SODIMM DDR3L 1600/1333, max. 8GB	SODIMM DDR3L 1600/1333, max. 8GB	SODIMM DDR3L 1600/1333, max. 8GB	SODIMM DDR3L 1600/1333, max. 8GB
Ethernet Controller	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2
Audio Codec	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
Storage	mSATA SSD 64GB	mSATA SSD 64GB	mSATA SSD 64GB	mSATA SSD 64GB	mSATA SSD 64GB
OS	Windows 10 IoT Enterprise/ Windows 7 Embedded/Windows 8 Embedded	Windows 10 IoT Enterprise/ Windows 7 Embedded/Windows 8 Embedded	Windows 10 IoT Enterprise/ Windows 7 Embedded/Windows 8 Embedded	Windows 10 IoT Enterprise/ Windows 7 Embedded/Windows 8 Embedded	Windows 10 IoT Enterprise/ Windows 7 Embedded/Windows 8 Embedded
Connectors					
Back Panel I/O Port	1 x DC-in Power Jack 1 x USB 3.0, 1 x USB 2.0 2 x RJ45 10/100/1000 Mbps 1 x RS-232, 1 x RS-232/422/485 (Default: RS-232) 2 x PS/2 1 x VGA (Female) 1 x HDMI	1 x DC-in Power Jack 1 x USB 3.0, 3 x USB 2.0 2 x RJ45 10/100/1000 Mbps 1 x RS-232, 1 x RS-232/422/485 (Default: RS-232) 2 x PS/2 1 x VGA (Female) - Line out, Line in, Mic in	1 x DC-in Power Jack 1 x USB 3.0, 3 x USB 2.0 2 x RJ45 10/100/1000 Mbps 1 x RS-232, 1 x RS-232/422/485 (Default: RS-232) 2 x PS/2 1 x VGA (Female) - Line out, Line in, Mic in	1 x DC-in Power Jack 1 x USB 3.0, 3 x USB 2.0 2 x RJ45 10/100/1000 Mbps 1 x RS-232, 1 x RS-232/422/485 (Default: RS-232) 2 x PS/2 1 x VGA (Female) - Line out, Line in, Mic in	1 x DC-in Power Jack 1 x USB 3.0, 3 x USB 2.0 2 x RJ45 10/100/1000 Mbps 1 x RS-232, 1 x RS-232/422/485 (Default: RS-232) 2 x PS/2 1 x VGA (Female) - Line out, Line in, Mic in
Power					
Power Adapter	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	35W	38W	58W	60W	60W
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment					
Temperature	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

PP Series Windows Multitouch HMI

Intel® Core™ i5-7200U Kaby lake



Model Name	10.4"	15"	15.6" (16:9)	19"	21.5" (16:9)
	R10IK3S-PPT2	R15IK3S-PPC3	W15IK3S-PPA4	R19IK3S-PPM1	W22IK3S-PPA3
Display					
Resolution	1024 x 768	1024 x 768	1920 x 1080	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	300 nits	250 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	1700 : 1 (Typ.)	800 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)
Viewing Angle	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-85~85 (H); -85~85 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M (6bits+FRC)	16.2M (6bits+FRC)	16.7M	16.7M	16.7M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System					
Processor	Intel® Core™ i5-7200U Kaby lake 2.5GHz	Intel® Core™ i5-7200U Kaby lake 2.5GHz	Intel® Core™ i5-7200U Kaby lake 2.5GHz	Intel® Core™ i5-7200U Kaby lake 2.5GHz	Intel® Core™ i5-7200U Kaby lake 2.5GHz
Chipset	Intel® SoC Chipset	Intel® SoC Chipset	Intel® SoC Chipset	Intel® SoC Chipset	Intel® SoC Chipset
Memory	2 x DDR4 2133 SO-DIMM Max 16GB	2 x DDR4 2133 SO-DIMM Max 16GB	2 x DDR4 2133 SO-DIMM Max 16GB	2 x DDR4 2133 SO-DIMM Max 16GB	2 x DDR4 2133 SO-DIMM Max 16GB
Ethernet Controller	Intel® I211-AT + Intel Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I219-LM
Audio Codec	Realtek ALC283 HD	Realtek ALC283 HD	Realtek ALC283 HD	Realtek ALC283 HD	Realtek ALC283 HD
Storage	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors					
Back Side	• 1 x RS-232 (Optional 422/485) • 1 x RS-232 • 2 x USB 3.0 • 2 x RJ 45-10/100/1000 Mbps • 1 x HDMI	• 1 x RS-232 (Optional 422/485) • 1 x RS-232 • 2 x USB 3.0 • 2 x RJ 45-10/100/1000 Mbps • 1 x HDMI	• 1 x RS-232 (Optional 422/485) • 1 x RS-232 • 2 x USB 3.0 • 2 x RJ 45-10/100/1000 Mbps • 1 x HDMI	• 1 x RS-232 (Optional 422/485) • 1 x RS-232 • 2 x USB 3.0 • 2 x RJ 45-10/100/1000 Mbps • 1 x HDMI	• 1 x RS-232 (Optional 422/485) • 1 x RS-232 • 2 x USB 3.0 • 2 x RJ 45-10/100/1000 Mbps • 1 x HDMI
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	36W	38W	58W	60W	80W
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment					
Temperature	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

7~23.8" Windows Multitouch HMI P0 Series



“ **OPEN FRAME.
BEST FOR KIOSK
APPLICATIONS.** ”

- 7~23.8-inch screen with P-Cap touch
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/8/7



Fanless cooling system

64GB mSATA SSD

2 x Mini PCIe (For Wi-Fi and 3G module)

USB 3.0, USB 2.0

RS-232/422/485, two RJ45, HDMI 1.4

Open frame

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Custom configuration



Memory

Application



Self-Service Payment Kiosk

“THE SYSTEM MEETS
EMV BANKING SECURITY
STANDARD.”

By Installing a self-service payment kiosk with Winmate's 15-inch open frame HMI and data reader components the gas station was able to bring automation to the kiosks.

PO Series Windows Multitouch HMI

Intel® Core™ i5-7200U Kaby Lake



Model Name	15"	15.6" (16:9)	19"	21.5" (16:9)	23.8" (16:9)
	R15IK3S-POC3	W15IK3S-POA4	R19IK3S-POM1	W22IK3S-POA3	W24IK3S-POA2
Display					
Resolution	1024 x 768	1920 x 1080	1280 x 1024	1920 x 1080	1920 x 1080
Brightness	250 nits	300 nits	250 nits	250 nits	250 nits
Contrast Ratio	700 : 1 (Typ.)	800 : 1 (Typ.)	1000 : 1 (Typ.)	3000 : 1 (Typ.)	3000 : 1 (Typ.)
Viewing Angle	-80~80 (H); -70~70 (V)	-85~85 (H); -85~85 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System					
Processor	Intel® Core™ i5-7200U Kaby Lake, 2.5GHz (Turbo to 3.1GHz)	Intel® Core™ i5-7200U Kaby Lake, 2.5GHz (Turbo to 3.1GHz)	Intel® Core™ i5-7200U Kaby Lake, 2.5GHz (Turbo to 3.1GHz)	Intel® Core™ i5-7200U Kaby Lake, 2.5GHz (Turbo to 3.1GHz)	Intel® Core™ i5-7200U Kaby Lake, 2.5GHz (Turbo to 3.1GHz)
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated
Memory	SODIMM DDR4 2133, max. 16GB	SODIMM DDR4 2133, max. 16GB	SODIMM DDR4 2133, max. 16GB	SODIMM DDR4 2133, max. 16GB	SODIMM DDR4 2133, max. 16GB
Storage	64GB M.2 Key SATA III (Up to 256GB)	64GB M.2 Key SATA III (Up to 256GB)	64GB M.2 Key SATA III (Up to 256GB)	64GB M.2 Key SATA III (Up to 256GB)	64GB M.2 Key SATA III (Up to 256GB)
Ethernet Controller	Intel® GIGABIT-LAN Controller I211AT + PHY I219LM	Intel® GIGABIT-LAN Controller I211AT + PHY I219LM	Intel® GIGABIT-LAN Controller I211AT + PHY I219LM	Intel® GIGABIT-LAN Controller I211AT + PHY I219L	Intel® GIGABIT-LAN Controller I211AT + PHY I219LM
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors					
Serial	1 x RS-232/422/485 (Default : RS-232)	1 x RS-232/422/485 (Default : RS-232)	1 x RS-232/422/485 (Default : RS-232)	1 x RS-232/422/485 (Default : RS-232)	1 x RS-232/422/485 (Default : RS-232)
Power Input	1 x DC-in Power Jack (+12V)	1 x DC-in Power Jack (+12V)	1 x DC-in Power Jack (+12V)	1 x DC-in Power Jack (+12V)	1 x DC-in Power Jack (+12V)
USB Port	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
Ethernet	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)
HDMI	1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical					
Dimension	350 x 292 x 48 mm	375.5 x 252 x 48 mm	438.9 x 382.3 x 54 mm	552 x 312.72 x 52.8 mm	593.6 x 382.3 x 54 mm
Mounting	Open Frame Mount	Open Frame Mount	Open Frame Mount	Open Frame Mount	Open Frame Mount
Cooling System	Fanless	Fanless	Fanless		Fanless
Environment					
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

PO Series Windows Multitouch HMI

Intel® Celeron® N2930 Bay Trail-M



Model Name	7" (17:10)	10.1" (16:10)	15"
	W07IB3S-POT1	W10IB3S-POA1	R15IB3S-POC3
Display			
Resolution	1024 x 600	1920 x 1200	1024 x 768
Brightness	320 nits	700 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	750 : 1 (Typ.)	700 : 1 (Typ.)
Viewing Angle	-70~75 (H); -75~75 (V)	-89~89 (H); -89~89 (V)	-80~80 (H); -70~70 (V)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz
Chipset	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated
Memory	2GB DDR3L 1600 SODIMM	2GB DDR3L 1600 SODIMM	2GB DDR3L 1600 SODIMM
Storage	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD
Ethernet Controller	Dual Intel® I210AT GbE	Dual Intel® I210AT GbE	Dual Intel® I210AT GbE
Security Support	TPM 1.2	TPM 1.2	TPM 1.2
OS	Windows 10 IoT Enterprise Windows 7 Embedded Windows 8 Embedded	Windows 10 IoT Enterprise Windows 7 Embedded Windows 8 Embedded	Windows 10 IoT Enterprise Windows 7 Embedded Windows 8 Embedded
Connectors			
Serial	1 x RS-232/422/485 (Default: RS-232)	1 x RS-232/422/485 (Default: RS-232)	1 x RS-232/422/485 (Default: RS-232)
Power Input	1 x DC-in Power Jack	1 x DC-in Power Jack	1 x DC-in Power Jack
USB Port	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
Ethernet	2 x RJ 45-10/100/1000 Mbps (LAN)	2 x RJ 45-10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)
HDMI	1 x HDMI	1 x HDMI	1 x HDMI
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	198.3 x 116.1 x 41.7 mm	279.28 x 168 x 41.1 mm	350 x 292 x 48 mm
Mounting	Open Frame Mount	Open Frame Mount	Open Frame Mount
Cooling System	Fanless	Fanless	Fanless
Environment			
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

PO Series Windows Multitouch HMI

Intel® Celeron® N2930 Bay Trail-M



Model Name	19"	21.5" (16:9)	23.8" (16:9)
	R19IB3S-POM1	W22IB3S-POA3	W24IB3S-POA2
Display			
Resolution	1280 x 1024	1920 x 1080	1920 x 1080
Brightness	250 nits	250 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	3000 : 1 (Typ.)	3000 : 1 (Typ.)
Viewing Angle	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive
System			
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz
Chipset	Intel Atom™ SoC Integrated	Intel Atom™ SoC Integrated	Intel Atom™ SoC Integrated
Memory	SODIMM DDR3L 1600, max. 8GB	SODIMM DDR3L 1600, max. 8GB	SODIMM DDR3L 1600, max. 8GB
Storage	mSATA SSD 64GB (Default), Max 512GB	mSATA SSD 64GB (Default), Max 512GB	mSATA SSD 64GB (Default), Max 512GB
Ethernet Controller	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2
Security Support	TPM 1.2	TPM 1.2	TPM 1.2
OS	Windows 10 IoT Enterprise Windows 8.1 Industry Pro Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Industry Pro Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Industry Pro Windows 7 Embedded
Connectors			
Serial	1 x RS-232/422/485 (Default: RS-232)	1 x RS-232/422/485 (Default: RS-232)	1 x RS-232/422/485 (Default: RS-232)
Power Input	1 x DC-in Power Jack	1 x DC-in Power Jack	1 x DC-in Power Jack
USB Port	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
Ethernet	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)
HDMI	1 x HDMI	1 x HDMI	1 x HDMI
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimension	438.9 x 382.3 x 54 mm	552 x 312.72 x 52.8 mm	593.6 x 382.3 x 54 mm
Mounting	Open Frame Mount	Open Frame Mount	Open Frame Mount
Cooling System	Fanless	Fanless	Fanless
Environment			
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

15~21.5" Chassis Multitouch HMI PT Series



“ STANDALONE. FOR YOUR POINT-OF-SALE APPLICATION. ”

- 15~21.5"-inch screen with P-Cap touch
- Intel® Celeron® N2930 Bay Trail-M
- Freescale™ Arm® Cortex® -A9 i.MX6 Dual/Quad-core
- Windows 10/8/7 or Android 6.0



Fanless cooling system

Two 1 Watt speakers

USB 2.0

RS-232/422/485, RJ45

Chassis, VESA mount, Standalone

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Custom configuration



AR Glass



PoE

Application



Retail Point-of-Sales Display

“DURABLE, VERSATILE
AND EASY TO USE.”

User-friendly interface of chassis HMI now serves as countertop cash register in the retail shop.

PT Series Chassis Multitouch HMI

Intel® Celeron® N2930 Bay Trail-M



NEW



NEW



NEW



Industrial Panel PC

Model Name	15"	15.6" (16:9)	19"	21.5" (16:9)
	R15IB3S-PTC3	W15IB3S-PTA3	R19IB3S-PTA3	W22IB3S-PTA3
Display				
Resolution	1024 x 768	1920 x 1080	1280 x 1024	1920 x 1080
Brightness	300 nits	300 nits	350 nits	250 nits
Contrast Ratio	700 : 1 (Typ.)	800 : 1 (Typ.)	100 : 1 (Typ.)	3000 : 1 (Typ.)
Viewing Angle	-80~80 (H) ; -80~80 (V)	-85~85 (H) ; -85~85 (V)	-85~85 (H) ; -80~80 (V)	-89~89 (H) ; -89~89 (V)
Display Color	16.2M	262K	16.2M	16.2M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
System				
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz
Chipset	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated	Intel Atom® SoC Integrated
Memory	2GB DDR3L-1600 SODIMM (max 8GB)	2GB DDR3L-1600 SODIMM (max 8GB)	2GB DDR3L-1600 SODIMM (max 8GB)	2GB DDR3L-1600 SODIMM (max 8GB)
Ethernet Controller	Dual Intel® I210-AT GbE	Dual Intel® I210-AT GbE	Dual Intel® I210-AT GbE	Dual Intel® I210-AT GbE
Storage	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD	64GB M.2 SSD
Security Support	TPM 1.2	TPM 1.2	TPM 1.2	TPM 1.2
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard
Connectors				
COM Port	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
DC-Input	1 x DC-in Power Jack	1 x DC-in Power Jack	1 x DC-in Power Jack	1 x DC-in Power Jack
Ethernet	1 x RJ 45-10/100/1000 Mbps (LAN), 1 x RJ 45 (LAN/Optional PoE)	1 x RJ 45-10/100/1000 Mbps (LAN), 1 x RJ 45 (LAN/Optional PoE)	1 x RJ 45-10/100/1000 Mbps (LAN), 1 x RJ 45 (LAN/Optional PoE)	1 x RJ 45-10/100/1000 Mbps (LAN), 1 x RJ 45 (LAN/Optional PoE)
USB Port	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
Speaker	2 x 1 Watt Speaker	2 x 1 Watt Speaker	2 x 1 Watt Speaker	2 x 1 Watt Speaker
Power				
Power Consumption	21 W	21 W	30 W	35 W
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power over Ethernet (PoE)	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical				
Mounting	VESA Mount, 100 x 100, 75 x 75 mm	VESA Mount, 100 x 200, 100 x 100, 75 x 75 mm	VESA Mount, 100 x 100 mm	VESA Mount, 100 x 100, 200 x 100 mm
Cooling System	Fanless	Fanless	Fanless	Fanless
Environment				
IP Rating	Front IP65	Front IP65	Front IP65	Front IP65
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

PT Series Chassis Multitouch HMI

Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core



NEW



Model Name	15"	15.6" (16:9)
	R15FA3S-PTC3	W15FA3S-PTA3
Display		
Resolution	1024 x 768	1920 x 1080
Brightness	300 nits	300 nits
Contrast Ratio	700 : 1 (Typ.)	800 : 1 (Typ.)
Viewing Angle	-80~80 (H) ; -80~80 (V)	-85~85 (H) ; -85~85 (V)
Display Color	16.2M	262K
Touch	Projected Capacitive	Projected Capacitive
System		
Processor	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)	Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)
Memory	1GB LPDDR3	1GB LPDDR3
Storage	Onboard 16GB eMMC (Default)/Micro SD card	Onboard 16GB eMMC (Default)/Micro SD card
OS	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)
Connectors		
COM Port	1 x RS-232/422/485	1 x RS-232/422/485
DC-Input	1 x DC Input Phoenix type Terminal Block	1 x DC Input Phoenix type Terminal Block
Ethernet	1 x RJ45 (LAN/Optional PoE)	1 x RJ45 (LAN/Optional PoE)
Speaker	2 x 1 Watt Speaker	2 x 1 Watt Speaker
USB Port	1 x USB 2.0 1 x Micro USB OTG 1 x Mini USB	1 x USB 2.0 1 x Micro USB OTG,
SD Slot	1 x Micro SD Card	1 x Micro SD Card
CANBus	1 x CANBus (DB9)	1 x CANBus (DB9)
Power		
Power Consumption	13 W	13 W
Power Input	+12V DC in	+12V DC in
Power over Ethernet (PoE)	Support PoE (Optional), requires IEEE 802.3at 25W power input	Support PoE (Optional), requires IEEE 802.3at 25W power input
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical		
Mounting	VESA Mount, 100 x 100, 75 x 75 mm	VESA Mount, 100 x 200, 100 x 100, 75 x 75 mm
Cooling System	Fanless	Fanless
Environment		
IP Rating	Front IP65	Front IP65
Operating Temp.	0°C to 40°C	0°C to 40°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Certifications		
Safety	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Custom configuration



Memory



Storage



Resistive
Touch



AR Glass



Housing

Application



Logistics Hub Information Terminal

"WINMATE - FAST
AND EFFICIENT
CUSTOMIZATION
SERVICE."

Winmate's 17-inch chassis
panel PC and flexibility allow
user to customize their own.

8.4~21.5" Fanless Power-Efficient Panel PC

Bay Trail Series



“ **INDUSTRIAL DESIGN.
POWER EFFICIENT CPU.** ”

- 8.4~21.5-inch screen
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/8/7



Fanless cooling system

USB 3.0, USB 2.0

RS-232, RS-232/422/485, two RJ45, HDMI 1.4

Open frame, panel mount, chassis, front IP65

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Bay Trail Fanless Power-Efficient Panel PC

Intel® Celeron® N2930 Bay Trail-M



		6.5"	7" (17:10)	8.4"	10.1" (17:10)	10.4"
Model Name	Open Frame	R06IB3S-OFA1	W07IB3S-OFT1	R08IB3S-OFU1	W10IB3S-OFH1	R10IB3S-OFT2
	Panel Mount	R06IB3S-CHA1	W07IB3S-PMT1	R08IB3S-PMU1	W10IB3S-PMH1	R10IB3S-PMT2
	IP65	R06IB3S-IPA1	W07IB3S-IPT1	R08IB3S-IPU1	W10IB3S-IPH1	R10IB3S-IPT2
	Chassis	R06IB3S-PMA1	W07IB3S-CHT1	R08IB3S-CHU1	W10IB3S-CHH1	R10IB3S-CHT2
Display						
Resolution		640 x 480	1024 x 600	800 x 600	1024 x 600	1024 x 768
Brightness		700 nits	320 nits	600 nits	450 nits	350 nits
Contrast Ratio		600 : 1 (Typ.)	1000: 1 (Typ.)	600: 1 (Typ.)	800: 1 (Typ.)	1200:1 (Typ.)
Active Area				170.4 (H) x 127.8 (V)	210.4 (H) x 157.8 (V)	210.4 (H) x 157.8 (V)
Viewing Angle		-80~80 (H); -70~70 (V)	-70~75 (H); -75~75 (V)	-75~75 (H); -60~70 (V)	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)
Pixel Pitch				0.213 (H) x 0.213 (V)	0.21525 (H) x 0.21525 (V)	0.0685 (H) x 0.2055 (V)
Display Color		16.2M/262k colors	16.7M (8bits/color)	16.2M (8bits/color)	16.7M	16.2M (6bits+FRC)
Touch		Resistive	Resistive	Resistive	Resistive	Resistive
System						
Processor		Intel® Celeron® N2930 Quad-core, 1.83 GHz	Intel® Celeron® N2930 Quad-core, 1.83 GHz	Intel® Celeron® N2930 Quad-core, 1.83 GHz	Intel® Celeron® N2930 Quad-core, 1.83 GHz	Intel® Celeron® N2930 Quad-core, 1.83 GHz
System Chipset		Intel Atom® Soc Integrated	Intel Atom® Soc Integrated	Intel Atom® Soc Integrated	Intel Atom® Soc Integrated	Intel Atom® Soc Integrated
Memory		2 x SO-DIMM, max. 8GB DDR3L 1600	2 x SO-DIMM, max. 8GB DDR3L 1600	2 x SO-DIMM, max. 8GB DDR3L	2 x SO-DIMM, max. 8GB DDR3L	2 x SO-DIMM, max. 8GB DDR3L
Ethernet Controller		Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE
BIOS		AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit
Audio Codec		Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
I/O Chipset		Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865
Storage		2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA
OS		Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)
Connectors						
Ethernet		2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
Serial Interface		1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485
USB		1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
HDMI		1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI
Power						
Power Input		+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment						
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms duration	Operating: 15G, 11ms duration	Operating: 15G, 11ms duration	Operating: 15G, 11ms duration	Operating: 15G, 11ms duration
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications						
Safety		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Bay Trail Fanless Power-Efficient Platform

Intel® Celeron® N2930 Bay Trail-M



Model Name	Open Frame	10.4"	12.1"	15"	15.6" (16:9)	17"
	Panel Mount	R10IB3S-OPF1	R12IB3S-OFM2	R15IB7T-OFM3	W15IB7T-OFM2	R17IB7T-OFM1
	IP65	R10IB3S-PMP1	R12IB3S-PMM2	R15IB7T-PMC3	W15IB7T-PMA2	R17IB7T-PMM1
	Chassis	R10IB3S-IPP1	R12IB3S-IPM2	R15IB7T-IPC3	W15IB7T-IPA2	R17IB7T-IPM1
Display						
Resolution		800x600	1024 x 768	1024 x 768	1366 x 768	1280 x 1024
Brightness		600 nits	500 nits	250 nits (Optional 400 nits)	300 nits	350 nits (Optional 450 nits)
Contrast Ratio		400 : 1 (Typ.)	700 : 1 (Typ.)	700 : 1 (Typ.)	500 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area		211.2 (H) x 158.4 (V)	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)	344.232 (H) x 193.536 (V)	337.92 (H) x 270.34 (V)
Viewing Angle		-70~70 (H); -70~60 (V)	-80~80 (H); -70~70 (V)	-70~70 (H); -60~60 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Pixel Pitch		0.264 (H) x 0.264 (V)	0.21525 (H) x 0.21525 (V)	0.297 (H) x 0.297 (V)	0.252 (H) x 0.252 (V)	0.264 (H) x 0.264 (V)
Display Color		16.2M (8bits/color)	16.2M (8bit)	16.2M (6bits+FRC)	16.7M	16.7M (6bits+FRC)
Touch		Resistive	Resistive	Resistive	Resistive	Resistive
System						
Processor		Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Quad-core, 1.83 GHz	Intel® Celeron® N2930 Quad-core, 1.83 GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, Controller1.83GHz
System Chipset		Intel Atom® SoC Integrated	Intel Atom® Soc Integrated	Intel Atom® Soc Integrated	Intel Atom® Soc Integrated	Intel Atom® Soc Integrated
Memory		2 x SO-DIMM DDR3L 1600, max. 8GB	2 x SO-DIMM, max. 8GB DDR3L	2 x SO-DIMM DDR3L 1600, max. 8GB	2 x SO-DIMM DDR3L 1600, max. 8GB	2 x SO-DIMM DDR3L 1600, max. 8GB
Ethernet Controller		Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE
BIOS		AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit
Audio Codec		Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
I/O Chipset		Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865
Storage		2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA
OS		Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/Windows 7 Embedded/Linux 4.1.15 (QT 5.5)
Connectors						
Ethernet		2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
Serial Interface		2 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485
USB		1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0
HDMI		-	1 x HDMI	-	-	-
VGA		-	-	1 x VGA	1 x VGA	1 x VGA
Audio		-	-	1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)
Keyboard/Mouse		2 x PS/2	-	2 x PS/2	2 x PS/2	2 x PS/2
Power						
Power Input		+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment						
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing : 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing : 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing : 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications						
Safety		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Bay Trail Fanless Power-Efficient Platform

Intel® Celeron® N2930 Bay Trail-M



		18.5" (16:9)	19"	19"	21.5" (16:9)	23.8" (16:9)
Model Name	Open Frame	W18IB7T-OFA2	R19IB7T-OFM1	R19IB7T-OFA1	W22IB7T-OFA3	W24IB7T-OFA2
	Panel Mount	W18IB7T-PMA2	R19IB7T-PMM1	R19IB7T-PMA1	W22IB7T-PMA3	W24IB7T-PMA2
	IP65	W18IB7T-IPA2	R19IB7T-IPM1	R19IB7T-IPA1	W22IB7T-IPA3	W24IB7T-IPA2
	Chassis	W18IB7T-CHA2	R19IB7T-CHM1	R19IB7T-CHA1	W22IB7T-CHA3	W24IB7T-CHA2
Display						
Resolution		1366 x 768	1280 x 1024	1280x1024	1920 x 1080	1920 x 1080
Brightness		250 nits	250 nits	400 nits	250 nits	250 nits
Contrast Ratio		1000 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)	3000 : 1 (Typ.)
Active Area			376.32 (H) x 301.06 (V)	376.32 (H)x301.06 (V)	476.64 (H) x 268.11 (V)	527.04 (H) x 296.46 (V)
Viewing Angle		-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch			0.294 (H) x 0.294 (V)	0.294 (H) x 0.294 (V)	0.248 (H) x 0.248 (V)	0.274 (H) x 0.274 (V)
Display Color		16.7M (8bits/color)	16.7M	16.7M (8 bits/colors)	16.7M (8bits/color)	16.7M (8bits/color)
Touch		Resistive	Resistive	Resistive	Resistive	Resistive
System						
Processor		Intel® Celeron® N2930 Quad-core 1.83 GHz Processor	Intel® Celeron® N2930 Quad-core 1.83 GHz Processor	Intel® Celeron® N2930 Bay Trial-M 1.83GHz Processors	Intel® Celeron® N2930 Quad-core 1.83 GHz Processor	Intel® Celeron® N2930 Bay Trial-M 1.83GHz Processors
System Chipset		Intel Atom® Soc	Intel Atom® Soc	Intel Atom® SoC	Intel Atom® Soc	Intel Atom® Soc
Memory		2 x SO-DIMM DDR3L 1600, max. 8GB	2 x SO-DIMM DDR3L 1600, max. 8GB	SO-DIMM DDR3L 1600, max. 8GB	2 x SO-DIMM DDR3L 1600, max. 8GB	SO-DIMM DDR3L 1600, max. 8GB
Ethernet Controller		Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE	Intel® I210-AT GbE
BIOS		AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit
I/O Chipset		Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865
Audio Codec		Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC888 HD
Storage		2.5" HDD, mSATA SSD	2.5" HDD, mSATA SSD	2.5" HDD, mSATA SSD	2.5" HDD, mSATA SSD	2.5" HDD, mSATA SSD
OS		Windows 10 IoT Enterprise/ Windows 8 Embedded/ Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/ Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/ Windows 8 Embedded/ Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/Windows 8 Embedded/ Windows 7 Embedded/Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise/ Windows 8 Embedded/ Windows 7 Embedded/Linux 4.1.15 (QT 5.5)
Connectors						
Ethernet		2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
Serial Interface		1 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485
USB		1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0
VGA		1 x VGA	1 x VGA	1 x VGA (Female)	1 x VGA	1 x VGA (Female)
Audio		Line in, Line out, Mic in	Line in, Line out, Mic in	Line in, Line out, Mic in	Line in, Line out, Mic in	Line in, Line out, Mic in
Keyboard/Mouse		2 x PS/2	2 x PS/2	2 x PS/2	2 x PS/2	2 x PS/2
Power						
Power Input		+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment						
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 45°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 95% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications						
Safety		CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI Panel PC

Fanless

High Performance

Arm Cortex

Application-Ready

15~24" High Performance Panel PC Kaby Lake Series

Custom configuration



Memory



Storage



High
Brightness



AR Glass



Housing



Wide Power



Application



Forklift Operator Terminal

"FLEXIBLE
CUSTOMIZATION."

Winmate's 6 and 10.1-inch open frame panel PC with anti-vibration design and lockable connectors were implemented as part of a forklift solution.

“ VARIOUS MOUNTING SOLUTIONS. ”

- 15~24-inch screen with resistive touch
- Intel® Core™ i7-7700T
- Intel® Core™ i5-7500T
- Intel® Core™ i3-7100T
- Windows 10 IoT Enterprise



Fanless cooling system

Intel® H170 Chipset

2.5" HDD 500GB

Two M.2 (1 for Wi-Fi, 1 for SSD), PCIe x16

Four USB 3.0

Two RS-232/422/485, two RJ45, HDMI 1.4, DP 1.2

Lockable power connector

Open frame, panel mount, chassis, P-Cap chassis, front IP65

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Kaby Lake High Performance Panel PC

Intel® Core™ i7-7700T
Intel® Core™ i5-7500T
Intel® Core™ i3-7100T



		15"	17"	18.5" (16:9)	19"
Model Name	Open Frame	R15IK7T-OFC3	R17IK7T-OFM1	W18IK7T-OFA2	R19IK7T-OFA1
	Panel Mount	R15IK7T-PMC3	R17IK7T-PMM1	W18IK7T-PMA2	R19IK7T-PMA1
	IP65	R15IK7T-IPC3	R17IK7T-IPM1	W18IK7T-IPA2	R19IK7T-IPA1
	Chassis	R15IK7T-CHC3	R17IK7T-CHM1	W18IK7T-CHA2	R19IK7T-CHA1
Display					
Resolution		1024 x 768	1280 x 1024	1366 x 768	1280 x 1024
Brightness		250 nits (Optional 400 nits)	350 nits (Optional 450 nits)	250 nits	400 nits
Contrast Ratio		500 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)
Viewing Angle		-70~70 (H); -60~60 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Display Color		16.2M (6bits+FRC)	16.7M (6 bits + FRC)	16.7M (6 bits + FRC)	16.7M (8 bits/colors)
Touch		5-Wire Resistive (Default) AR Glass (Optional)	5-Wire Resistive (Default) AR Glass (Optional)	5-Wire Resistive (Default) AR Glass (Optional)	5-Wire Resistive (Default) AR Glass (Optional)
System					
Processor		Intel® Core™ i7-7700T, 2.9 GHz/Intel® Core™ i5-7500T, 2.7 GHz / Intel® Core™ i3-7100T, 3.4 GHz	Intel® Core™ i7-7700TE, 2.9 GHz/Intel® Core™ i5-7500TE, 2.7 GHz / Intel® Core™ i3-7100TE, 3.4 GHz	Intel® Core™ i7-7700TE, 2.9 GHz/Intel® Core™ i5-7500TE, 2.7 GHz/ Intel® Core™ i3-7100TE, 3.4 GHz	Intel® Core™ i7-7700T, 2.9 GHz/Intel® Core™ i5-7500T, 2.7 GHz/ Intel® Core™ i3-7100T, 3.4 GHz
Chipset		Intel® H170 Chipset	Intel® H170 Chipset	Intel® H170 Chipset	Intel® H170 Chipset
Memory		1 x SODIMM, Max. 16GB DDR4 2400 MHz, default 4GB	1 x SODIMM, Max 16GB DDR4 2400 MHz, default 4GB	1 x SODIMM, Max 16GB DDR4 2400 MHz, default 4GB	1 x SODIMM, Max 16GB DDR4 2400 MHz, default 4GB
Ethernet Controller		Intel® I211-AT + Intel® Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I219-LM
Audio Codec		Realtek ALC283 HDc	Realtek ALC283 HD	Realtek ALC283 HD	Realtek ALC283 HD
Storage		1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)	1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)	1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)	1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)
Expansion Slots		2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16	2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16	2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16	2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16
Security Support		TPM 2.0	TPM 2.0	TPM 2.0	TPM 2.0
OS		Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors					
USB		4 x USB 3.0	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
COM Port		1 x RS-232/422/485 (Default RS-232), 1 x RS-232	2 x RS-232/422/485 (Default RS-232), 1 x RS-232	2 x RS-232/422/485 (Default RS-232), 1 x RS-232	2 x RS-232/422/485 (Default RS-232), 1 x RS-232
Ethernet		2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
HDMI Port		1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4
Display Port		1 x DP 1.2	1 x DP 1.2	1 x DP 1.2	1 x DP 1.2
Audio		Mic in, Line out	Mic in, Line out	Mic in, Line out	Mic in, Line out
DVD Optional		Optional	Optional	Optional	Optional
User Controls					
Control Buttons		Clear CMOS	Clear CMOS	Clear CMOS	Clear CMOS
LED Indicators		Power, HDD	Power, HDD	Power, HDD	Power, HDD
Power					
Power Input		+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption		58W	93W	88W	85W
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment					
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Certifications					
Safety		CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Kaby Lake High Performance Panel PC

Intel® Core™ i7-7700T

Intel® Core™ i5-7500T

Intel® Core™ i3-7100T



Industrial Panel PC

Model Name		21.5" (16:9)	23.8" (16:9)	32" (16:9)
	Open Frame	W22IK7T-OFA3	W24IK7T-OFA2	
	Panel Mount	W22IK7T-PMA3	W24IK7T-PMA2	
	IP65	W22IK7T-IPA3	W24IK7T-IPA2	
	Chassis	W22IK7T-CHA3	W24IK7T-CHA2	W32IK7T-PCA3
Display				
Resolution		1920 x 1080	1920 x 1080	1920 x 1080
Brightness		250 nits	250 nits	350 nits
Contrast Ratio		3000 : 1 (Typ.)	3000 : 1 (Typ.)	3000 : 1 (Typ.)
Viewing Angle		-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Display Color		16.7M	16.7M (8bits/colors)	16.7M (8bits/colors)
Touch		5-Wire Resistive (Default) AR Glass (Optional)	5-Wire Resistive (Default) AR Glass (Optional)	Projective capacitive
System				
Processor		Intel® Core™ i7-7700T, 2.9 GHz Intel® Core™ i5-7500T, 2.7 GHz Intel® Core™ i3-7100T, 3.4 GHz	Intel® Core™ i7-7700T, 2.9~3.8 GHz Intel® Core™ i5-7500T, 2.7~3.3GHz Intel® Core™ i3-7100T, 3.4GHz	Intel® Core™ i7-7700T, 2.9~3.8 GHz Intel® Core™ i5-7500T, 2.7~3.3GHz Intel® Core™ i3-7100T, 3.4GHz
Chipset		Intel® 8 series (Q170)	Intel® 8 series (Q170)	Intel® 8 series (Q170)
Memory		1 x SODIMM, Max 16GB DDR4 2400 MHz, default 4GB	1 x SODIMM, max. 16GB DDR4 2133 MHz, default 4GB	1 x SODIMM, max. 16GB DDR4 2133 MHz, default 4GB
Ethernet Controller		Intel® 211-AT + Intel® Gigabit Ethernet PHY I219-LM	Intel® 211-AT + Intel® Gigabit Ethernet PHY I219-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I219-LM
Audio Codec		Realtek ALC283 HD	Realtek ALC283 HD	Realtek ALC283 HD
Storage		1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)	1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)	1 x M.2 SSD, Max 256GB 1 x 2.5" 500GB HDD (Default)
Expansion Slots		2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16	2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16	2 x M.2 (1 for WiFi, 1 for SSD), 1 x PCIe x16
Security Support		TPM 2.0	TPM 1.2	TPM 1.2
OS		Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors				
USB		4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
COM Port		1 x RS-232/422/485 (Default RS-232), 1 x RS-232	1 x RS-232/422/485 (Default RS-232), 1 x RS-232	1 x RS-232/422/485 (Default RS-232), 1 x RS-232
Ethernet		2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000Mbps	2 x RJ45 10/100/1000Mbps
HDMI Port		1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4
Display Port		1 x DP 1.2	1 x DP 1.2	1 x DP 1.2
Audio		Mic in, Line out	Mic in, Line out	Mic in, Line out
DVD Optional		Yes (Optional)	Yes (Optional)	Yes (Optional)
User Controls				
Control Buttons		Clear CMOS	Clear CMOS	Clear CMOS
LED Indicators		Power, HDD	Power, HDD	Power, HDD
Power				
Power Input		+12V DC	+12V DC	+12V DC
Power Consumption		60W	93W	100W
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment				
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Haswell High Performance Panel PC Haswell Series



“**EFFICIENT SOLUTION.**”

- 15~21.5-inch screen
- Intel® Core™ i5-4300M
- Windows 10/8/7



Thermal solution with fan

Intel® QM87 chipset

Two mini PCIe (1 for Wi-Fi, 1 for SSD), PCIe x16

Four USB 3.0

Two RS-232, RS-232/422/485, two RJ45, VGA, two PS/2

Lockable power connector

Open frame, panel mount, chassis, front IP65

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Custom configuration



Memory



Storage



High
Brightness



AR Glass



Housing

Application



Military Simulation

“FAST AND EFFICIENT
CUSTOMIZATION
SERVICE.”

With several custom modifications, Winmate's 8.4-inch front IP65 panel PC now helps military personnel familiarize themselves with command tasks and simulate real field environments.

Haswell High Performance Panel PC

Intel® 4th Generation Core™ i5-4300M



Industrial Panel PC

		15"	15.6" (16:9)	17"
Model Name	Open Frame	R15IH7T-OFC3	W15IH7T-OFA2	R17IH7T-OFM1
	Panel Mount	R15IH7T-PMC3	W15IH7T-PMA2	R17IH7T-PMM1
	IP65	R15IH7T-IPC3	W15IH7T-IPA2	R17IH7T-IPM1
	Chassis	R15IH7T-CHC3	W15IH7T-CHA2	R17IH7T-CHM1
Display				
Resolution		1024 x 768	1366 x 768	1280 x 1024
Brightness		250 nits (Optional 400 nits)	300 nits	350 nits (Optional 450 nits)
Contrast Ratio		700 : 1 (Typ.)	500 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area		344.232 (H) x 193.536 (V)	344.232 (H) x 193.536 (V)	1280 (H) x 1024 (V)
Viewing Angle		-70~70 (H); -60~60 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Display Color		16.2M	16.7M	16.7M
Touch		Resistive	Resistive	Resistive
System				
Processor		Intel® 4th Gen. Core™ i5-4300M up to 3.3GHz	Intel® 4th Gen. Core™ i5-4300M up to 3.3GHz	Intel® 4th Gen. Core™ i5-4300M up to 3.3GHz
System Chipset		Intel® QM87	Intel® QM87	Intel® QM87
Memory		2 x DDR3L SO-DIMM, max.16GB	2 x DDR3L SO-DIMM, max.16GB	2 x DDR3L SO-DIMM, max.16GB
Ethernet Controller		Intel® I211-AT + Intel® Gigabit Ethernet PHY I218-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I218-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I218-LM
BIOS		AMI BIOS	AMI BIOS	AMI BIOS
I/O Chipset		Fintek F81865	Fintek F81865	Fintek F81865
Audio Codec		Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
Storage		2.5" SSD , 2.5" HDD, mSATA SSD	2.5" SSD, 2.5" HDD, mSATA SSD	2.5" SSD, 2.5" HDD, mSATA SSD
OS		Windows 10 IoT Enterprise Windows Embedded 8 Windows 7 Embedded Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise Windows Embedded 8 Windows 7 Embedded Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise Windows Embedded 8 Windows 7 Embedded Linux 4.1.15 (QT 5.5)
Connectors				
Power		Lockable DC In Power Jack	Lockable DC In Power Jack	Lockable DC In Power Jack
Ethernet		2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
Serial Interface		2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)
USB		4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
VGA		1 x VGA	1 x VGA	1 x VGA
Audio		1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)
Keyboard/Mouse		2 x PS/2	2 x PS/2	2 x PS/2
DVD		Yes (Optional)	Yes (Optional)	Yes (Optional)
Power				
Power Input		+12V DC	+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment				
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Haswell High Performance Panel PC

Intel® 4th Generation Core™ i5-4300M



		19"	21.5" (16:9)
Model Name	Open Frame	R19IH7T-OFA1	W22IH7T-OFA3
	Panel Mount	R19IH7T-PMA1	W22IH7T-PMA3
	IP65	R19IH7T-IPA1	W22IH7T-IPA3
	Chassis	R19IH7T-CHA1	W22IH7T-CHA3
Display			
Resolution		1280 x 1024	1920 x 1080
Brightness		400 nits	250 nits
Contrast Ratio		1000 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area		408.24 (H) x 255.15 (V)	476.64 (H) x 268.11 (V)
Viewing Angle		-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color		16.7M	16.7M
Touch		Resistive	Resistive
System			
Processor		Intel® 4th Gen. Core™ i5-4300M up to 3.3GHz	Intel® 4th Gen. Core™ i5-4300M up to 3.3GHz
System Chipset		Intel® QM87	Intel® QM87
Memory		2x DDR3L SO-DIMM, max.16GB	2x DDR3L SO-DIMM, max.16GB
Ethernet Controller		Intel® 211-AT + Intel® Gigabit Ethernet PHY I218-LM	Intel® I211-AT + Intel® Gigabit Ethernet PHY I218-LM
BIOS		AMI BIOS	AMI BIOS
I/O Chipset		Fintek F81865	Fintek F81865
Audio		Realtek ALC886 HD Audio Codec	Realtek ALC886 HD Audio Codec
Storage		2.5" SSD/2.5" HDD/mSATA SSD	2.5" SSD/2.5" HDD/mSATA SSD
OS		Windows 10 IoT Enterprise Windows Embedded 8 Windows 7 Embedded Linux 4.1.15 (QT 5.5)	Windows 10 IoT Enterprise Windows Embedded 8 Windows 7 Embedded Linux 4.1.15 (QT 5.5)
Connectors			
Power		Lockable DC In Power Jack	Lockable DC In Power Jack
Ethernet		2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
Serial Interface		2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)
USB		4 x USB 3.0	4 x USB 3.0
VGA		1 x VGA	1 x VGA
Audio		1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)
Keyboard/Mouse		2 x PS/2	2 x PS/2
DVD		Yes (Optional)	Yes (Optional)
Power			
Power Input		+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment			
Operating Temp.		0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms duration	Operating: 15G, 11ms duration
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications			
Safety		CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

10.4~23.8" High Performance Panel PC Ivy Bridge Series

Custom configuration



Memory



Storage



Housing



AR Glass



Resistive Touch



Application



Payment Machine

"NEW SOLUTION
THROUGH
COLLABORATION."

Self-service solution evolves through collaboration with Winmate, 12-inch open frame panel PC with touchscreen now serves as a payment terminal.

"DURABLE AND RELIABLE."

- 10.4~23.8-inch screen
- Intel® Core™ i7-3520M
- Intel® Core™ i5-3230M
- Windows 10/8/7



Thermal solution with fan

Intel® HM76 chipset

Two mini PCIe (1 for Wi-Fi, 1 for SSD), PCIe x16, PCIe x4

Four USB 3.0

Two RS-232, RS-232/422/485, two RJ45, VGA, two PS/2

Lockable power connector

Open frame, panel mount, chassis, front IP65

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Ivy Bridge High Performance Panel PC

Intel® Core™ i7-3520M

Intel® Core™ i5-3230M



		10.4"	12.1"	12.1"
Model Name	Open Frame	R10IV7T-OFT2	R12IV7T-OFL1	R12IV7T-OFM2
	Panel Mount	R10IV7T-PMT2	R12IV7T-PML1	R12IV7T-PM2
	IP65	R10IV7T-IPT2	R12IV7T-IPL1	R12IV7T-IPM2
	Chassis	R10IV7T-CHT2	R12IV7T-CHL1	R12IV7T-CHM2
Display				
Resolution		1024 x 768	800 x 600	1024 x 768
Brightness		350 nits	450 nits	500 nits
Contrast Ratio		1200 : 1 (Typ.)	700 : 1 (Typ.)	700 : 1 (Typ.)
Active Area		210.4 (H) x 157.8 (V)	246.0 (H) x 184.5 (V)	245.76 (H) x 184.32 (V)
Viewing Angle		-88~88 (H); -88~88 (V)	-80~80 (H); -75~65 (V)	-80~80 (H); -70~70 (V)
Display Color		16.2M colors	16.2M (8bits/colors)	16.2M
Touch		Resistive	Resistive	Resistive
System				
Processor		Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)	Intel® Core™ i7-3520M 2.9 GHz Core i5-3230M 2.6 GHz (Default)	Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)
System Chipset		Intel® HM76	Intel® HM76	Intel® HM76
Memory		2 x DDR3L 1600MHz SO-DIMM, max. 16GB	2 x DDR3 1333/1600MHz SO-DIMM, max. 16GB	2 x DDR3L 1600MHz SO-DIMM, max. 16GB
Ethernet Controller		Dual Broadcom BCM57780 PCIe GbE	Dual Broadcom BCM57780 PCIe GbE	Dual Broadcom BCM57780 PCIe GbE
BIOS		AMI BIOS	AMI BIOS	AMI BIOS
I/O Chipset		Winbond W83628UHG	Winbond W83628UHG	Winbond W83628UHG
Audio		Realtek ALC886 HD Codec (Line in, Line out, Mic in)	Realtek ALC888 HD Codec (Line in, Line out, Mic in)	Realtek ALC886 HD Codec (Line in, Line out, Mic in)
Storage		2.5" HDD/2.5" SSD/mSATA SSD	2.5" HDD/2.5" SSD/mSATA SSD	2.5" HDD/2.5" SSD/mSATA SSD
OS		Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)
Connectors				
Ethernet		2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
Serial Interface		2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485
USB		4 x USB3.0	4 x USB 3.0	4 x USB3.0
VGA		1 x VGA	1 x VGA	1 x VGA
Audio		1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)
Keyboard/Mouse		2 x PS/2	2 x PS/2	2 x PS/2
Other		1 x VR knob	1 x VR knob	1 x VR knob
Power				
Power Input		+12V DC	+12V DC	+12V DC
Power Adaptor		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment				
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms duration	Operating: 15G, 11ms duration	Operating: 15G, 11ms duration
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

Ivy Bridge High Performance Panel PC

Intel® Core™ i7-3520M

Intel® Core™ i5-3230M



Model Name	Open Frame	15"	17"	19"
	Panel Mount	R15IV7T-PMC3	R17IV7T-PMM1	R19IV7T-PMM1
	IP65	R15IV7T-IPC3	R17IV7T-IPM1	R19IV7T-IPM1
	Chassis	R15IV7T-CHC3	R17IV7T-CHM1	R19IV7T-CHM1
Display				
Resolution		1024 x 768	1280 x 1024	1280 x 1024
Brightness		250 nits (Optional 400 nits)	350 nits (Optional 450 nits)	250 nits
Contrast Ratio		700:1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)
Active Area		304.1 (H) x 228.1 (V)	337.92 (H) x 270.336 (V)	376.32 (H) x 301.06 (V)
Viewing Angle		-70~70 (H); -60~60 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Display Color		16.2M (6bits+FRC)	16.2M	16.7M
Touch		Resistive	Resistive	Resistive
System				
Processor		Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)	Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)	Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)
System Chipset		Intel® HM76	Intel® HM76	Intel® HM76
Memory		2 x DDR3L 1600MHz SO-DIMM, max. 16GB	2 x DDR3L 1600MHz SO-DIMM, max. 16GB	2 x DDR3L 1600MHz SO-DIMM, max. 16GB
Ethernet Controller		Dual Broadcom BCM57780 PCIe GbE	Dual Broadcom BCM57780 PCIe GbE	Dual Broadcom BCM57780 PCIe GbE
BIOS		AMI BIOS	AMI BIOS	AMI BIOS
I/O Chipset		Winbond W83628UHG	Winbond W83628UHG	Winbond W83628UHG
Audio		Realtek ALC886 HD Codec (Line in, Line out, Mic in)	Realtek ALC886 HD Codec (Line in, Line out, Mic in)	Realtek ALC886 HD Codec (Line in, Line out, Mic in)
Storage		2.5" HDD/2.5" SSD/mSATA SSD	2.5" HDD/2.5" SSD/mSATA SSD	2.5" HDD/2.5" SSD/mSATA SSD
OS		Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)
Connectors				
Ethernet		2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
Serial Interface		2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)
USB		4 x USB3.0	4 x USB3.0	4 x USB3.0
VGA		1 x VGA	1 x VGA	1 x VGA
Audio		1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)
Keyboard/Mouse		2 x PS/2	2 x PS/2	2 x PS/2
VR Knob		1 x VR knob	1 x VR knob	1 x VR knob
DVD		Yes (Optional)	Yes (Optional)	Yes (Optional)
Power				
Power Input		+12V DC	+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment				
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Ivy Bridge High Performance Panel PC

Intel® Core™ i7-3520M

Intel® Core™ i5-3230M



		19"	21.5" (16:9)	24" (16:9)
Model Name	Open Frame	R19IV7T-OFA1	W22IV7T-OFA3	W24IV7T-OFA2
	Panel Mount	R19IV7T-PMA1	W22IV7T-PMA3	
	IP65	R19IV7T-IPA1	W22IV7T-IPA3	W24IV7T-IPA2
	Chassis	R19IV7T-CHA1	W22IV7T-CHA3	
Display				
Resolution		1280x1024	1920 x 1080	1920 x 1080
Brightness		400 nits	250 nits	250 nits
Contrast Ratio		1000 : 1 (Typ.)	1000 : 1 (Typ.)	3000 : 1 (Typ.)
Active Area		376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)	531.36 (H) x 298.89 (V)
Viewing Angle		-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Display Color		16.7M	16.7M (8bits/colors)	16.7M (8bits)
Touch		Resistive	Resistive	Resistive
System				
Processor		Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)	Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)	Intel® Core™ i7-3520M 2.9 GHz Intel® Core™ i5-3230M 2.6 GHz (Default)
System Chipset		Intel® HM76	Intel® HM76	Intel® HM76
Memory		2 x DDR3 1333/1600MHz SO-DIMM, max. 16GB	2 x DDR3L 1600MHz SO-DIMM, max. 16GB	2 x DDR3L 1600MHz SO-DIMM, max. 16GB
Ethernet Controller		Dual Broadcom BCM57780 PCIe GbE	Dual Broadcom BCM57780 PCIe GbE	Dual Broadcom BCM57780 PCIe GbE
BIOS		AMI BIOS	AMI BIOS	AMI BIOS
I/O Chipset		Winbond W83628UHG	Winbond W83628UHG	Winbond W83628UHG
Audio		Realtek ALC888 HD Codec (Line in, Line out, Mic in)	Realtek ALC886 HD Codec (Line in, Line out, Mic in)	Realtek ALC886 HD Codec (Line in, Line out, Mic in)
Storage		2.5" HDD/2.5" SSD/mSATA SSD	2.5" HDD/2.5" SSD/mSATA SSD	2.5" HDD/2.5" SSD/mSATA SSD
OS		Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)
Connectors				
Ethernet		2 x RJ45 10/100/1000	2 x RJ45 10/100/1000	2 x RJ45 10/100/1000
Serial Interface		2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)	2 x RS-232, 1 x RS-232/422/485 (RS-232 by default)
USB		4 x USB3.0	4 x USB3.0	4 x USB3.0
VGA		1 x VGA	1 x VGA	1 x VGA
Audio		Realtek ALC888 HD Codec (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)	1 x Audio (Line in, Line out, Mic in)
Keyboard/Mouse		2 x PS/2	2 x PS/2	2 x PS/2
VR Knob		1 x VR knob	1 x VR knob	1 x VR knob
DVD		Yes (Optional)	Yes (Optional)	Yes (Optional)
Power				
Power Input		+12V DC	+12V DC	+12V DC
Power Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment				
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

5.7~19" Arm Cortex Panel PC Freescall Series

Custom configuration



Memory



CPU



PoE



Housing



Application



Machine Controller

"LINUX OS FOR
DEMANDING CUSTOM
APPLICATIONS."

When the application requires
a unique software solution,
HMI with open Linux system
is the choice of developers.

“CUSTOM OS IMAGE.”

- 5.7~19-inch screen with resistive touch
- Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core
- Android 6.0
- Linux 4.1.15, QT 5.5
- Ubuntu 16.04



Fanless cooling system

16GB eMMC, micro SD card slot

USB 2.0, USB OTG

RS-232/422/485, RJ45, CANBus, micro HDMI

Lockable power connector

Open frame, front IP65

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

FreescalTM Arm[®] Cortex[®] Panel PC

FreescalTM Arm[®] Cortex[®]-A9 i.MX6 Dual-core



		5.7"	7" (17:10)	10.1" (17:10)
Model Name	IP65	R05FA3S-IPD1HM	W07FA3S-IPA3HM	W10FA3S-IPH1HM
	Open Frame	R05FA3S-OFD1HM	W07FA3S-OFA3HM	W10FA3S-OFH1HM
Display				
Resolution		640 x 480	1024 x 600	1024 x 600
Brightness		900 nits	250 nits	200 nits
Contrast Ratio		300 : 1 (Typ.)	700 : 1 (Typ.)	500 : 1 (Typ.)
Active Area		115.2 (H) x 86.4 (V)	153.6 (H) x 90.0 (V)	220.4 (H) x 129.1(V)
Viewing Angle		-70~70 (H); -40~60 (V)	-75~75 (H); -75~70 (V)	-70~70 (H); -50~60 (V)
Display Color		262K	262K	262K
Touch		Resistive	Resistive	Resistive
System				
Processor		Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1GHz (Optional Quad-core)	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1GHz (Optional Quad-core)	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1GHz (Optional Quad-core)
Storage		Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card
Memory		1GB LPDDR3	1GB LPDDR3	1GB LPDDR3
OS		Android 6.0 Ubuntu 16.04 Linux 4.1.15 (QT 5.5)	Android 6.0 Ubuntu 16.04 Linux 4.1.15 (QT 5.5)	Android 6.0 Ubuntu 16.04 Linux 4.1.15 (QT 5.5)
Connectors				
Serial Interface		1 x RS-232 (Optional 422/485)	1 x RS-232 (Optional 422/485)	1 x RS-232 (Optional 422/485)
USB		1 x USB host USB 2.0	1 x USB host USB 2.0	1 x USB host USB 2.0
SD Card Slot		1 x Micro SD Card Slot	1 x Micro SD Card Slot	1 x Micro SD Card Slot
HDMI		1 x Micro HDMI	1 x Micro HDMI	1 x Micro HDMI
Micro USB		1 x USB OTG	1 x USB OTG	1 x USB OTG
Power		Phoenix type 1 x 2 pin Terminal Block	Phoenix type 1 x 2 pin Terminal Block	Phoenix type 1 x 2 pin Terminal Block
Ethernet		1 x RJ45 10/100/1000 LAN/PoE	1 x RJ45 10/100/1000 LAN/PoE	1 x RJ45 10/100/1000 LAN/PoE
Power				
Power Input		+12V DC	+9~24V DC	+12V DC
Power Consumption		15W	15W	16W
Power over Ethernet (PoE)		PoE require IEEE 802.3at 25W	PoE require IEEE 802.3at 25W	PoE require IEEE 802.3at 25W
Mechanical				
Cooling System		Fanless	Fanless	Fanless
Environment				
Operating Temp.		-0°C to 50°C	-0°C to 50°C	-0°C to 50°C
Humidity		10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating		Front IP65	Front IP65	Front IP65
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

Freescal Arm Cortex Panel PC

Freescal™ Arm® Cortex®-A9 i.MX6 Dual-core



Industrial Panel PC

		15"	19"
Model Name	IP65	R15FA3S-IPC3HM	R19FA3S-IPM1HM
	Open Frame	R15FA3S-OFC3HM	R19FA3S-OFM1HM
Display			
Resolution		1024 x 768	1280 x 1024
Brightness		250 nits	250 nits
Contrast Ratio		700 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area		304.1 (H) x 228.1 (V)	376.3 (H) x 301.0 (V)
Viewing Angle		-80~80 (H); -70~70 (V)	-85~85 (H); -80~80 (V)
Display Color		1 6.2M	16.7M
Touch		Resistive	Resistive
System			
Processor		Freescal™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)	Freescal™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz (Optional Quad-core)
Storage		Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card
Memory		1GB LPDDR3	1GB LPDDR3
OS		Android 6.0 Ubuntu 16.04 Linux 4.1.15 (QT 5.5)	Android 6.0 Ubuntu 16.04 Linux 4.1.15 (QT 5.5)
Connectors			
Serial Interface		1 x RS-232 (Optional 422/485)	1 x RS-232 (Optional 422/485)
USB		1 x USB host USB 2.0	1 x USB host USB 2.0
SD Card Slot		1 x Micro SD Card Slot	1 x Micro SD Card Slot
HDMI		1 x Micro HDMI	1 x Micro HDMI
Micro USB		1 x USB OTG	1 x USB OTG
Power		1 x 2 pin Terminal Block	1 x 2 pin Terminal Block
Ethernet		1 x RJ45 10/100/1000 LAN/PoE	1 x RJ45 10/100/1000 LAN/PoE
Power			
Power Input		+12V DC	+12V DC
Power Consumption		18W	20W
Power over Ethernet (PoE)		+12V DC in PoE require IEEE 802.3at 25W	
Power Adapter AC		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Cooling System		Fanless	Fanless
Environment			
Operating Temp.		0°C to 50°C	0°C to 50°C
Humidity		10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
IP Rating		Front IP65	Front IP65
Certifications			
Safety		CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

15~21.5" Application-Ready Panel PC PCI Slot Series



“ CONNECTION TO CUSTOM
PERIPHERALS WITH PCI SLOT. ”

- 15~21.5-inch screen with resistive touch
- Intel® 3 Gen. Core i7/i5/i3
- Windows 10/8/7



Thermal solution with fan

Intel® HM76 chipset

Expansion slot PCI

Four USB 3.0

Two RS-232, RS-232/422/485, two RJ45, VGA, two RS/2

Lockable power connector

Open frame, panel mount

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Custom configuration



Memory



Storage



Housing



PCIe



AR Glass



Resistive
Touch

Application



Assembly Line

“BRING EFFICIENCY TO
PRODUCTION.”

Panel PC with PCI slot
provides an uncomplicated
connection to a number of
custom peripherals on the
factory floor.

PCI Slot Application-Ready Panel PC

Intel® 3rd Gen. Core i7/i5/i3



Industrial Panel PC

		15"	17"	19"	21.5" (16:9)
Model Name	Panel Mount	R15IV7T-PMC3PS	R17IV7T-PMM1PS	R19IV7T-PMM1PS	W22IV7T-PMA3PS
	Open Frame	R15IV7T-OFC3PS	R17IV7T-OFM1PS	R19IV7T-OFM1PS	W22IV7T-OFA3PS
Display					
Resolution		1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness		250 nits	350 nits	250 nits	250 nits
Contrast Ratio		500 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area		304.1 (H) x 228.1 (V)	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle		-70~70 (H); -60~60 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color		16.2M (6bits+FRC)	16.7M (6bits+FRC)	16.7M	16.7M (8bits/color)
System					
Processor		Intel® 3rd Gen. Core i7/i5/i3	Intel® 3rd Gen. Core i7/i5/i3	Intel® 3rd Gen. Core i7/i5/i3	Intel® 3rd Gen. Core i7/i5/i3
Chipset		Intel® HM76	Intel® HM76	Intel® HM76	Intel® HM76
Memory		2 x DDR3L SO-DIMM, max.16GB	2 x DDR3L SO-DIMM, max.16GB	2 x DDR3L SO-DIMM, max.16GB	2 x DDR3L SO-DIMM, max.16GB
Ethernet Controller		Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780 GbE Controller
Storage		2.5" HDD or mSATA SSD	2.5" HDD or mSATA SSD	2.5" HDD or mSATA SSD	2.5" HDD or mSATA SSD
Audio Codec		Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
I/O Chipset		Fintek F81865	Fintek F81865	Fintek F81865	Fintek F81865
BIOS		AMI 16Mbit	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit
LCD Support		Single Channel 24-bit LVDS	Single Channel 24-bit LVDS	Single Channel 24-bit LVDS	Single Channel 24-bit LVDS
OS		Windows 7 Embedded Windows Embedded 8 Windows 10 ToT Enterprise	Windows 7 Embedded Windows Embedded 8 Windows 10 ToT Enterprise	Windows 7 Embedded Windows Embedded 8 Windows 10 ToT Enterprise	Windows 7 Embedded Windows Embedded 8 Windows 10 ToT Enterprise
Connectors					
Serial		2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485
USB		4 x USB3.0	4 x USB3.0	4 x USB3.0	4 x USB3.0
Keyboard/Mouse		2 x PS/2	2 x PS/2	2 x PS/2	2 x PS/2
Environment					
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity		30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock		Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms	Operating: 15G, 11ms
Vibration		Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications					
Safety		CE, FCC	CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

15~19" Application-Ready Panel PC Rack Mount Series



“ **DESIGNED FOR
RACK MOUNT CABINETS.** ”

- 15~19-inch screen
- Intel® 3 Gen. Core i7/i5
- Windows 10/8/7
- Linux 4.1.15 (QT 5.5)



Thermal solution with fan

Intel® HM76 chipset

Brightness adjustment knob

Four USB 3.0

Two RS-232, RS-232/422/485, two RJ45, VGA, two RS/2

Rack mount

0°C to 50°C operating temperature

Accessories

Standard

AC Adapter

Power Cord

Driver CD

Custom configuration



Memory



Storage



DVD

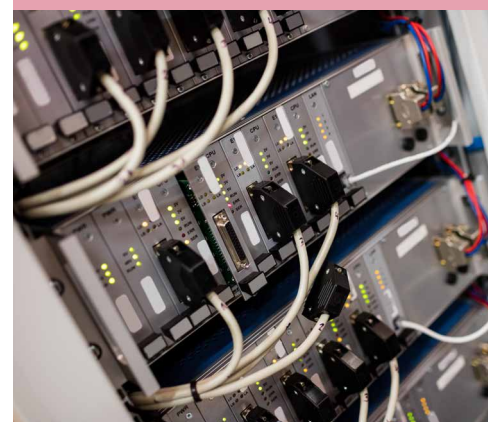


Resistive
Touch



AR Glass

Application



Server Room

“LARGE SCREEN TO
MONITOR AND CONTROL
SERVER CABINET.”

19-inch rack mount panel PC
in a rack mount housing fits in
to a server cabinets.

Rack Mount Application-Ready Panel PC

Intel® Core™ i7-3520M

Intel® Core™ i5-3230M

Industrial Panel PC



Model Name	15"	17"	19"
	R15IV7T-RKC3	R17IV7T-RKM1	R19IV7T-RKM1
Display			
Resolution	1024 x 768	1280 x 1024	1280 x 1024
Brightness	250 nits	350 nits	250 nits
Contrast Ratio	700 : 1 (Typ.)	800 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	337.92 (H) x 270.336 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-70~70 (H); -65~60 (V)	-80~80 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M (6bits+FRC)	16.7M	16.7M (8bits/colors)
Touch	Resistive	Resistive	Resistive
System			
Processor	Intel® Core™ i7-3520M, 2.9GHz Intel® Core™ i5-3230M, 2.6GHz	Intel® Core™ i7-3520M, 2.9GHz Intel® Core™ i5-3230M, 2.6GHz	Intel® Core™ i7-3520M, 2.9GHz Intel® Core™ i5-3230M, 2.6GHz
System Chipset	Intel® HM76	Intel® HM76	Intel® HM76
Memory	2 x DDR3L 1333/1600MHz SO-DIMM, max.16GB	2 x DDR3L 1333/1600MHz SO-DIMM, max.16GB	2 x DDR3L 1333/1600MHz SO-DIMM, max.16GB
Ethernet Controller	Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780 GbE
BIOS	AMI 16Mbit	AMI 16Mbit	AMI 16Mbit
Audio Codec	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
I/O Chipset	Fintek F81865	Fintek F81865	Fintek F81865
Storage	2.5" HDD/mSATA	2.5" HDD/mSATA	2.5" HDD/mSATA
OS	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)	Windows 7 Embedded Windows 8 Embedded Windows 10 IoT Enterprise Linux 4.1.15 (QT 5.5)
Connectors			
Ethernet	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps
Serial Interface	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485
USB	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
VGA	1 x VGA (Female)	1 x VGA (Female)	1 x VGA (Female)
Audio	Line out, Line in, Mic in	Line out, Line in, Mic in	Line out, Line in, Mic in
Keyboard/Mouse	2 x PS/2	2 x PS/2	2 x PS/2
DVD	Optional	Optional	Optional
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Adaptor	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock	Operating:15G, 11ms	Operating:15G, 11ms	Operating:15G, 11ms
Vibration	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing: 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

Rack Mount Application-Ready Panel PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	15"	17"	19"
	R15IB7T-RKC3	R17IB7T-RKM1	R19IB7T-RKM1
Display			
Resolution	1024 x 768	1280 x 1024	1280 x 1024
Brightness	700 nits	350 nits	250 nits
Contrast Ratio	2000 : 1 (Typ.)	1000 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-70~70 (H); -60~60 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M	16.7M (6bits + FRC)	16.7M (8bits/colors)
Touch	5 Wire Resistive (Optional)	5 Wire Resistive (Optional)	5 Wire Resistive (Optional)
System			
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz
System Chipset	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC
Memory	SODIMM DDR3L 1600/1333, max. 8GB	SODIMM DDR3L 1600/1333, max. 8GB	SODIMM DDR3L 1600/1333, max. 8GB
Ethernet Controller	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2	Intel® I210-AT GbE LAN x 2
Audio Codec	Realtek ALC886 HD	Realtek ALC886 HD	Realtek ALC886 HD
SATA	2 x SATA	2 x SATA	2 x SATA
Storage	2.5" HDD/2.5" SSD/mSATA	2.5" HDD/2.5" SSD/mSATA	2.5" HDD/2.5" SSD/mSATA
OS	Windows 10 IoT Enterprise Windows 7 Embedded Windows 8 Embedded	Windows 10 IoT Enterprise Windows 7 Embedded Windows 8 Embedded	Windows 10 IoT Enterprise Windows 7 Embedded Windows 8 Embedded
Other	2 x Mini PCIe (1 for WiFi, 1 for 3G Module)	2 x Mini PCIe (1 for WiFi, 1 for 3G Module)	2 x Mini PCIe (1 for WiFi, 1 for 3G Module)
Connectors			
Ethernet	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
Serial Interface	2 x RS-232, 1 x RS-232/422/485 (Default: RS-232)	2 x RS-232, 1 x RS-232/422/485 (Default: RS-232)	2 x RS-232, 1 x RS-232/422/485 (Default: RS-232)
USB	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0	1 x USB 3.0, 3 x USB 2.0
VGA	1 x VGA (Female)	1 x VGA (Female)	1 x VGA (Female)
Audio	Line out, Line in, Mic in	Line out, Line in, Mic in	Line out, Line in, Mic in
Keyboard/Mouse	2 x PS/2	2 x PS/2	2 x PS/2
DVD	Optional	Optional	Optional
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Adaptor	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment			
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Shock	Operating:15G, 11ms	Operating:15G, 11ms	Operating:15G, 11ms
Vibration	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing : 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing : 5 Hz~500 Hz/2.16 Grms/3 Axis	Operating: 5 Hz~500 Hz/1 Grms/3 Axis Packing : 5 Hz~500 Hz/2.16 Grms/3 Axis
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Industrial Panel PC

Product

HMI
Panel PC

Fanless

High
Performance

Arm
Cortex

Application-
Ready

6



EMBEDDED COMPUTING

Embedded Computing

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Embedded Computing

Overview

Winmate provides a full range of embedded platforms for you to build unique solutions for industrial embedded systems. Our embedded computing solutions are designed to give developers the freedom to build fast and convenient solutions for industrial applications such as factory automation, machine control, transportation, IoT gateways and edge computing.

Our embedded computing solution include:

- The latest Android™, Windows® and Linux operating system
- IoT gateways, embedded box PCs, industrial servers and Single Board Computers
- Board development and production based on your needs

With Winmate embedded computers, you can rapidly implement industrial IoT applications to improve existing systems, integrate new solutions and generate more revenue.



Product

IoT
Gateway

Systems

Boards &
Modules

Converter

Product Overview

Our industrial IoT gateway product series offers wireless connectivity, expansion possibilities and necessary connectors in a compact form factor. With the EAC Mini IoT Gateway, you can collect data from manufacturing facilities and send it directly to cloud servers. This solution is suitable for smart factory and machine automation applications.

IoT Gateway Comparison Table



Model Name	EACIL20	EACFA20	EACIL21	EACIL67
CPU	Intel® Celeron® N3350	Freescale Arm® Cortex® -A9 i.MX6 Dual-core	Intel® Celeron® N3350	Intel® Celeron® N3350
OS	Windows® 10 IoT Enterprise, Linux 4.1.15 (QT 5.5), Ubuntu 16.04	Android 6.0, Linux 4.1.15 (QT 5.5), Ubuntu 16.04	Windows® 10 IoT Enterprise, Linux 4.1.15 (QT 5.5), Ubuntu 16.04	Windows® 10 IoT Enterprise, Linux 4.1.15 (QT 5.5), Ubuntu 16.04
Expansion	✓	✓	✗	✗
HDMI	✓	✗	✗	✗
USB	Two USB 3.0 Type-A	Two USB 2.0 Type-A	USB 2.0 Type-A, USB 3.0 Type-C	USB 2.0 Type-A, USB 3.0 Type-C
IP Rating	IP30	IP30	IP30	IP67

Product

IoT Gateway

Systems

Boards & Modules

Converter

Industrial Box PC

Winmate provides industrial box PCs with varying levels of computing power and housing to suit your specific needs in applications such as mobile automation, transport, railway, automotive, traffic engineering and power automation.

Single Board Computers (SBC) and Converter Boards

Winmate provides embedded boards that can handle every task in applications ranging from industrial automation to UAV controllers. A wide range of single board computers include a Windows-based small-size 3.5" SBC, mini-ITX industrial motherboards and Android-based embedded boards. We also provide a range of converter boards to expand your application.

IoT Gateway

EAC Mini

Custom configuration



Memory



Storage



4G LTE



mSATA
Expansion



WiFi



Mounting
Options

Application



Renewable Energy Power Converter

“THE RIGHT AMOUNT OF
I/O AND CONNECTIVITY”

Dual Layer EAC Mini IoT
Gateway was used as the
main system for an energy
converter.

“ **CONNECT EVERYTHING,
CONTROL EVERYWHERE.** ”

- Compact design
- Intel® Celeron® N3350 Apollo Lake
- Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core
- Windows 10, Android, Linux 4.1.15 (QT 5.5), Ubuntu



Fanless cooling system

Expansion module for additional interfaces

Compact size

HDMI

USB 2.0, USB 3.0 or USB Type-C

Two RJ45

Desk, wall, VESA, DIN-Rail

IP30 or IP67-rated water and dust proof

Accessories

Standard

Terminal Block 2 pin to 2.5Ø
Female Adapter Cable

Driver CD

Quick Start Guide

Mounting Kits

EAC Mini IoT Gateway

Intel® Celeron® N3350 Apollo Lake
Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core

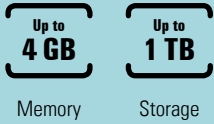


Model Name	EACIL20	EACFA20	EACIL21	EACIL67
System				
Processor	Intel® Celeron® N3350, 1.1 GHz	Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz	Intel® Celeron® N3350, 1.1 GHz	Intel® Celeron® N3350, 1.1 GHz
BIOS	Insyde UEFI	-	Insyde UEFI	Insyde UEFI
Graphic Interface	Intel® HD Graphics		Intel® HD Graphics	Intel® HD Graphics
Expansion Slot	mPCIe: 1 x Full-size mPCIe slot USB Wafer: 2 x USB Wafer	mPCIe: 1 x Full-size mPCIe slot USB Wafer: 2 x USB Wafer	mPCIe: 1 x Full-size mPCIe slot	mPCIe: 1 x Full-size mPCIe slot
Watchdog Timer	Programmable 256 levels, timer interval 1 to 255 sec.		Programmable 256 levels, timer interval 1 to 255 sec.	Programmable 256 levels, timer interval 1 to 255 sec.
Storage	eMMC: Onboard 32 GB (Default) mSATA: up to 1TGB (Option)	eMMC: Onboard 16 GB (Default)	eMMC: Onboard 32 GB (Default), mSATA: up to 1TGB (Option)	eMMC: Onboard 32 GB (Default), mSATA: up to 1TGB (Option)
OS	Windows® 10 IoT Enterprise/Linux 4.1.15 (QT 5.5)/Ubuntu	Android 6.0/ Linux 4.1.15 (QT 5.5)/Ubuntu	Windows® 10 IoT Enterprise/Linux 4.1.15 (QT 5.5)/Ubuntu	Windows® 10 IoT Enterprise/Linux 4.1.15 (QT 5.5)/Ubuntu
Expansion Module	- EACWSLT-222 WWAN Expansion Board (Single SIM Slot) - EACWSLT-231 3-port RS232/422/485 w/ isolation - EACWSLT-232 16-Channel Digital I/O w/ isolation - EACWSLT-233 2-port CANBUS w/ isolation - EACWLST-234 3 -port USB 2.0 - EACWLST-235 2-port RS232/422/485 w/ isolation - EACWLST-236 2-port Giga-LAN - EACWLST-237 WWAN Expansion Board (Dual SIM Slot)	- EACWSLT-222 WWAN Expansion Board (Single SIM Slot) - EACWSLT-231 3-port RS232/422/485 w/ isolation - EACWSLT-232 16-Channel Digital I/O w/ isolation - EACWSLT-233 2-port CANBUS w/ isolation - EACWLST-234 3-port USB 2.0 - EACWLST-235 2-port RS232/422/485 w/ isolation	-	-
Power				
Power Input	+9~36V DC	+9~36V DC	+9~36V DC	+9~36V DC
Grounding Protection	Chassis Grounding	Chassis Grounding	Chassis Grounding	-
Connectors				
USB	2 x USB3.0	2 x USB2.0	2 x USB 2.0	1 x USB2.0
Ethernet	2 x Giga LAN RJ45	2 x Giga LAN RJ45	2 x Giga LAN RJ45	2 x Giga LAN RJ45
Video	1 x HDMI, 1920 x 1080@60 Hz	1 x HDMI, 1920 x 1080@60 Hz	USB Type-C (Alt Mode)	USB Type-C (Alt Mode)
User Controls				
LED Indicator	1 x Power	1 x Power	1 x Power	1 x Power
Buttons	1 x Power Button, 1 x Reset Button	1 x Power Button, 1 x Reset Button	1 x Power Button, 1 x Reset Button	-
Mechanical				
Dimensions	100 x 70 x 31mm (One layer), 100 x 70 x 61mm (Double layer)	100 x 70 x 31mm (One layer), 100 x 70 x 61mm (Double layer)	100 x 115 x 31 mm (One layer)	100 x 115 x 31 mm (One layer)
Housing	Metal	Metal	Metal	Metal
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design
Net Weight	0.4 kg (One layer), 0.5 kg (Double layer)	0.4 kg (One layer), 0.5 kg (Double layer)	0.8 kg	1 kg
Mounting	Desk Mount (Default), Wall Mount (Default), VESA Mount (Optional), DIN-Rail Mount (Optional)	Desk Mount (Default), Wall Mount (Default), VESA Mount (Optional), DIN-Rail Mount (Optional)	Desk Mount (Default), Wall Mounting (Default), VESA Mount (Optional)	Desk Mount (Default), Wall Mount (Default), VESA Mount (Optional)
Environment				
Operating Temp.	0°C to 55°C	0°C to 55°C	0°C to 55°C	-20°C to 60°C
Humidity	10% to 90% RH	10% to 90% RH	10% to 90% RH	10% to 90% RH
Vibration	Operating, IEC 60068-2-64	Operating, IEC 60068-2-64	Operating, IEC 60068-2-64	Operating, IEC 60068-2-64
Shock	Operating, IEC 60068-2-27	Operating, IEC 60068-2-27	Operating, IEC 60068-2-27	Operating, IEC 60068-2-27
IP Rating	IP30	IP30	IP30	IP67
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC
IoT	Microsoft Azure IoT AWS IoT Greengrass			

Embedded Computing

EAC Pro Box PC

Custom configuration



Application



Factory Control Room

“POWERFUL CENTRAL CONTROL COMPUTER”

The rich I/O capacity and powerful computing of the EAC Pro allows it to act as the central computer for a factory control center.



“ ABUNDANT I/O CONNECTIVITY ”

- Flexibility, rich I/O capacity and multi-expansion
- 6th Generation Intel® Xeon® E3, 7th Generation Core™ i7/i5/i3
- Windows 10 IoT Enterprise



Fanless cooling system

64 GB mSATA SSD

USB 3.0, USB 2.0

RS-232/422/485, two RJ45, HDMI 1.4a

HD 4K resolution

4U height design

Panel mount, VESA mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

Mounting Clips and Screws

2 pin Terminal Block

AC Adapter

Power Cord

Driver CD

EAC Pro Box PC

Intel® Xeon® E3-1268L V5

Intel® Core™ i7-7700TE

Intel® Core™ i5-7500TE

Intel® Core™ i3-7100TE



Model Name	EAC PRO - IK90
System	
Processor	Intel® Xeon® E3-1268L V5 (8M Cache, 2.4 GHz up to 3.40 GHz) 35W Intel® Core™ i7-7700TE (8M Cache, 2.9 GHz up to 3.80 GHz) 35W Intel® Core™ i5-7500TE (6M Cache, 2.7GHz up to 3.30 GHz) Intel® Core™ i3-7100TE (4M Cache, 3.34 GHz) 35W, Fanless
BIOS	AMI UEFI/Insyde
Chipset	Intel® C236 PCH
Memory	2 x Slots DDR4 2133/2400 MHz with ECC, UP to 32GB or 2 x Slots DDR4 2133/2400 MHz without ECC, UP to 32GB
Expansion Slot	SKU 1: 1 PCIe x 16, 1 PCIe x 4, 1 PCI SKU 2: 2 PCIe x 8, 1 PCIe x 4, 1 PCI Window: Expansion I/O module
Graphic Chipset	Intel® HD Graphics P530/530
Watchdog Timer	Supported
Mechanical	
Dimensions	195 x 177 x 225 mm
Net Weight	5.54 kg (Without touch)
Mounting	Panel mount, table mount, rack mount
Audio Specification	
Audio Codec	Realtek Audio Codec
Audio Connectors	Line Out, Mic in (3.5mm Jack)
Environment	
Operating Temp.	0° to 40°C (32° to 104°F) (With HDD), 0° to 50°C (32° to 122°F) (With SSD/CFast), -15° to 55°C (-5° to 131°F) (w/Industrial SSD)
Vibration	IEC60068-2-64
Shock	EC60068-2-278
Storage Temp.	-20°C to 60°C (-4 to 140° F)
Power Management	
Power Input	+9V~36V DC-in (4-pin Terminal Block) or Din 4P DC Jack External +12V /200W AC Adaptor for External PCI express cards (Option) Max : 220W (Either one)
Power Consumption	Max : 50W (Without external I/O and PCI/PCIe Cards)
Power Adapter	AC +110~240V, Universal, ±10%
Video Output	
VGA	1 x VGA, 1080P at 60 Hz D-Sub 15pin
DP	2 x Display Ports 1.2, up to 4096 x 2304@60Hz, female connector with lock
Active Three Display	VGA + DP + DP
Connectors	
USB	6 x USB3.0, USB Type A (1A/5W)
Serial Port	2 x COM ports (RS-232/422/485) w/Isolation D-Sub 9, switch by SW (RS-232/422/485)
Ethernet	3 x Giga LAN RJ45 Connector (2 x Intel® I210 and 1 x I219 PHY) Intel® iAMT 11.0, Wake On LAN
Digital Input	8ch dry contact DI0~DI7, 1.5kV Isolation Logic 1 : Open ; Logic 0 : close to GND
Digital Output	8ch DO0~DO7, 1.5kV Isolation 20mA max/channel by internal com 12V or 5V
Physical Button & Indicators	
LED Indicator	4 x HDD, 1 x Wifi/3G (LTE)
Button	1 x Power Button w/LED, 1 x Clean CMOS Button, 1 x Reset Button
Certifications	
Safety	CE, FCC

Embedded Computing

M Series Box PC

Custom configuration



Memory



Storage



DIO



Optional 2nd
Storage



Optional Front
Display



Application



Assembly Line Controller

“EFFICIENT AND SMOOTH
OPERATION.”

The M-Series Box PC with the optional Front modular Display was used as an assembly line controller for a plastic bottle production facility.

“**MODULAR DESIGN.**”

- Intel Atom® E3845 Bay Trail
- Intel® Core™ i5-7200U Kaby Lake
- Windows 10/8/7



Fanless cooling system

Modular design

HDMI output

Four USB 3.0

Two Giga-LAN

PCIe x4, DIO x 8 (4 in/4 out)

Desktop, wall mount

Front IP65, 0°C to 50°C operating temperature

Accessories

Standard

2 pin Terminal Block

AC Adapter

Power Cord

Driver CD

M Series Box PC

IBMH100/IHMH100/IKMH100

NEW



Model Name	IBMH100	IHMH100	IKMH100
System			
Processor	Intel Atom® E3845 Processor; 2M Cache up to 1.91 GHz	Intel® Core™ i5-5200U Processor, 3M Cache 2.2Ghz (Turbo to 2.7GHz)	Intel® Core™ i5-7200U Processor (3M Cache, up to 3.1 GHz)
BIOS	AMI UEFI BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Memory	SODIMM DDR3L-1600 4GB (Optional up to 8GB with 2 slots)	SODIMM DDR3L-1600 4GB, (Optional up to 8GB with 2 slots)	SODIMM DDR4L-2133 4GB, (Optional up to 8GB with 2 slots)
Storage	Main Storage : Default 2.5" 64GB SSD Second Storage (Optional) : mSATA SSD	Main Storage: Default 2.5" 64GB SSD Second Storage (Optional) : mSATA SSD	Main Storage : Default 2.5" 64GB SSD Second Storage (Optional) : mSATA SSD
Expansion Slot	N/A	1 x PCIe x4	1 x PCIe x4
Graphic Chipset	Intel® HD	Intel® HD 5500	Intel® HD 5500
Ethernet Controller	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible	1000 Base-Tx Gigabit Ethernet Compatible
Audio Codec	Realtek ALC886	Realtek ALC886	Realtek ALC886
OS	Windows 10 IoT Enterprise Windows Embedded 8 Standard Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8 Standard Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8 Standard Windows Embedded Standard 7
Connectors			
Power	1 x Terminal Block 3pin	1 x Terminal Block 3pin)	1 x Terminal Block 3pin
Ethernet	2 x Gigabit LAN	2 x Gigabit LAN	2 x Gigabit LAN
Serial Interface	1 x RS-232/422/485 selectable serial port	1 x RS-232/422/485 selectable serial port 1 x RS-232 isolation serial port	1 x RS-232/422/485 with isolation serial port
USB	4 x USB 2.0	4 x USB 3.0	4 x USB 3.0
HDMI	1 x HDMI Output	1 x HDMI Output	1 x HDMI Output
VGA	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output	1 x D-Sub15 (VGA) Output
Audio	1 x Audio In Jack 1 x Audio Out Jack	1 x Audio In Jack 1 x Audio Out Jack	1 x Audio In Jack 1 x Audio Out Jack
Control Buttons	1 x Reset Key 1 x Power Button	1 x Reset Key 1 x Power Button	1 x Reset Key 1 x Power Button
LED Indicators	1 x 2.5" SSD Indicator	2 x 2.5" SSD Indicator	1 x 2.5" SSD Indicator
Power			
Power Input	+12~24V DC with protection fuse	+12~24V DC in with protection fuse	+9~29V DC with protection fuse
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimensions	276.18 x 228.8 x 45.20 mm	274.66 x 206.8 x 60.2 mm	274.66 x 206.8 x 60.2 mm
Mounting	Desktop, wall mount, panel mount with front display (Optional)	Desktop, wall mount, panel mount with front display (Optional)	Desktop, wall mount, panel mount with front display (Optional)
Color	Black	Black	Black
Construction	Aluminum	Aluminum	Aluminum
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	30% to 95% at 40°C (Non-condensing, RH)	30% to 95% at 40°C (Non-condensing, RH)	30% to 95% at 40°C (Non-condensing, RH)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Embedded Computing

EAC Box PC

Custom configuration



Memory



Storage



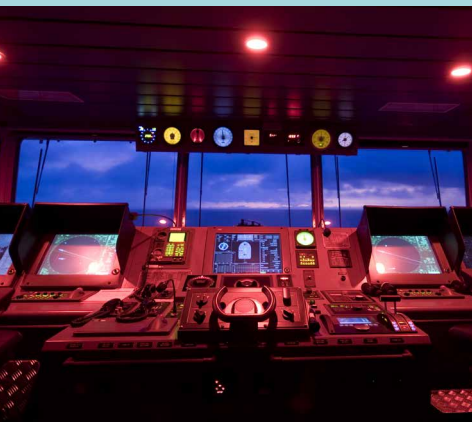
NMEA 0183



DIO



Application



Ship Bridge Embedded System

“WITHSTANDS ALL THAT
THE SEAS GIVE.”

The Marine EAC Box PC was used as the embedded system for the bridge on a ship. Withstands all the roughness at sea while controlling the ship's systems.

“ **MARINE CERTIFIED.
FOR HEAVY DUTY APPLICATIONS** ”

- Marine certified IEC 60945, DNV
- Intel® Core™ i5-7200U Kaby Lake
- Intel Atom® Dual-core
- Windows 10/8/7



Fanless cooling system

Four USB 3.0

RS-232/422/485, two RJ45

HDMI, VGA

Shock, vibration resistant

Aluminum housing

VESA mount, wall mount, Desktop

Accessories

Standard

AC Adapter

Power Cord

Driver CD

EAC Box PC

Intel® Core™ i5-7200U Kaby Lake
Intel Atom® Dual-core D2550

NEW



NEW



Model Name	I330EAC-IKW	I330EAC-IK3	I330EAC-ID3
System			
Processor	Intel® Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)	Intel® Kaby Lake Core™ i5-7200U, 2.5GHz (Turbo to 3.1)	Intel Atom® Dual-core D2550 1.86 GHz
BIOS	Insyde BIOS	Insyde BIOS	AMI 4Mbit Flash
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® NM10
Memory	1 x SODIMM DDR4L-2133 4GB (Max up to 16GB)	4GB DDR4-2133 SO-DIMM (Max 16GB)	1 x SODIMM, Max 4GB DDR3L 1600 (2GB Default)
Storage	1 x mSATA SSD 64GB (Default) 2 x 2.5" Removable SSD/HDD	1 x 64GB M.2 B Key SATA III (Options up to 512GB)	1 x mSATA SSD 32G (Default) 1 x 2.5" SATA HDD (Optional)
Graphic Chipset	Intel® HD 620	Intel® HD 620	Integrated in Intel® NM10, LVDS/ CRT
Ethernet Controller	1000 Base-Tx Gigabit Ethernet Compatible	Intel® I211 + I219LM Gigabit-LAN PHY	-
Connectors			
Power	1 x 3 pin Terminal Block	1 x 3 pin Terminal Block	1 x 3 pin Terminal Block
Ethernet	2 x RJ45 (Giga LAN)	2 x RJ45 (Giga LAN)	2 x RJ45 (Giga LAN)
Serial Interface	1 x RS-232/422/485 port (Selectable by BIOS)	1 x RS-232/422/485	3 x Isolated RS-422/485 auto-detected with Indicator
USB	4 x USB 3.0	2 x USB 3.0	2 x USB
GPIO	8 x Isolated DIDO, 4 In/4out (Optional)	8 Channel GPIO by Phoenix type Terminal Block 5V/12mA	1 x GPIO 4 in/out by Phoenix type Terminal Block
NMEA 0183 Port	8 x NMEA 0183 (Optional)	4 x NMEA 0183 Port (Optional)	
Display output	1 x HDMI Output 1 x VGA 1 x DVI	1 x HDMI 1 x VGA	1 x VGA
Audio	1 x Audio in Jack 1 x Audio out Jack	1 x Audio in Jack 1 x Audio out Jack	1 x Micro in, Line out Line in Jack
User Interfaces	1 x Power Button 1 x Reset Button	1 x Power Button 1 x Reset Button	1 x Power Button 1 x Reset Button
Power			
Power Input	+24V DC In with 1.5KV DC Isolation Resistance (+9~36V DC Input Acceptable)	+24V DC In with 1.5KV DC Isolation Resistance (+9~36V DC Input Acceptable)	+24V DC In with 1.5KV DC Isolation Resistance (+9~36V DC Input Acceptable)
Power Consumption	50 W (Typ.)	45 W (Typ.)	40 W (Typ.)
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical			
Dimensions	316.44 x 206.8 x 62.1 mm	296 x 169 x 66 mm	296 x 169 x 66 mm
Mounting	VESA, wall-mount, desktop	VESA, wall-mount, desktop	VESA, wall-mount, desktop
Color	Black	Silver	Silver
Housing	Aluminum	Aluminum	Aluminum
Environment			
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	0.7g@DNVGL CG-0339 (Class A)	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms	15G, 11ms	15G, 11ms
Certifications			
Marine	IEC 60945 4th Edition (Test Report Available)		IEC60945, DNV GL-CG-0339, IACS-E10
Safety	CE, FCC	CE, FCC	CE, FCC

Embedded Computing

DIN Rail Box PC

Custom configuration

Up to
8 GB

Memory

Up to
256 GB

Storage

Up to
215 GB

2nd Storage



WiFi

4G

4G LTE



“ **COMPACT.
FOR HAZARDOUS** „
LOCATIONS.

- DIN Rail mounting for industrial automation
- Intel® Celeron® Bay Trail-M N2930
- Windows 10/8/7



Class 1, Division 2 & ATEX Zone 2 device certified

Fanless cooling system

64GB mSATA SSD

One USB 3.0, three USB 2.0

RS-232/422/485, VGA

Four RJ45

20 Pin DI/DO

+9~36V DC power input with isolation

-20°C to 60°C operating temperature

Petrochemical Processing Plant

“STABLE PERFORMANCE
IN A COMPACT RUGGED
DESIGN.”

This DIN Rail Box PC was
integrated as the system
controller for a petrochemical
plant monitoring onsite data.

Accessories

Standard

Open Wire Power Cable

10 pin Terminal Block
female connector for DIDO

3 Pin Terminal Block to 2.5
female adapter

Power Cord

Driver CD

Cable Holder Clip

DIN Rail Mounting Clip

DIN Rail Box PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	IBDRW100	IBDRW100-EX
System		
Processor	Intel® Celeron® N2930 Bay Trail-M 1.83GHz, up to 2.16GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz, up to 2.16GHz
Chipset	Bay Trail SoC	Bay Trail SoC
Memory	1 x DDR3L 1333MHz SO-DIMM (Default 4GB, up to 8GB)	1 x DDR3L 1333MHz SO-DIMM (Default 4GB, up to 8GB)
Storage	Main Storage : Default : 64GB mSATA SSD Optional Second Storage : 2.5" SSD 64GB to 512GB	Main Storage : Default : 64GB mSATA SSD Optional Second Storage : 2.5" SSD 64GB to 512GB
Ethernet Controller	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN
OS	Windows Embedded Standard 7 Windows 7 Pro for Embedded system Windows Embedded 8.1 Industrial Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows 7 Pro for Embedded system Windows Embedded 8.1 Industrial Windows 10 IoT Enterprise
Connectors		
Power	1 x 3 Pin Terminal Block	1 x 3 Pin Terminal Block
Ethernet	4 x Giga LAN RJ45 (LAN3 disabled if WLAN Module is added)	4 x Giga LAN RJ45 (LAN3 disabled if WLAN Module is added)
Serial Interface	1 x RS-232/422/485 (Switch by jumper) Default: RS-232 1 x Isolated RS-422 (Default), RS-485 (Switch by jumper)	1 x RS-232/422/485 (Switch by jump) Default : RS-232 1 x RS-422/485 (Isolation)
USB	1 x USB3.0, 3 x USB2.0	1 x USB3.0, 3 x USB2.0
VGA	1 x VGA	1 x VGA
Digital I/O	1 x 20 pins terminal block DIDO (9in/9out)	1 x 20 pins terminal block DIDO (9in/9out)
Audio	1 x Line Out, Line In, Mic In	1 x Line Out, Line In, Mic In
Power		
Power Input	+9~36V DC with isolation	+9~36V DC with isolation
Power Consumption	25W	25W
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical		
Dimensions	139 x 65 x 152 mm	139 x 65 x 152 mm
Mounting	DIN Rail	DIN Rail
Color	Dark Silver	Dark Silver
Housing	Aluminum	Metal
Cooling System	Fanless design	Fanless design
Environment		
Operating Temp.	-20°C to 60°C	-20°C to 60°C
Storage Temp.	-40°C to 80°C	-40°C to 80°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration
Certifications		
Safety	CE, FCC	CE, FCC
HazLoc	-	Class 1, Division 2 & ATEX Zone 2 device certified

Embedded Computing

Arm Series

Custom configuration



Memory



PoE



Micro SD



DIO



RS-232



CPU

Application



Ticketing Machine Kiosk

"LOW POWER CONSUMPTION ARM SOLUTION."

A public transportation operator needed an Arm-based solution for their automatic ticketing kiosks. The fanless Arm Box PC with RS-232 and DIO ports was provided as a low power solution.



“**ARM BASED PC SOLUTION.**”

- Aluminum housing
- Arm® Cortex®-A9 i.MX6 Dual-core (FA30SB3-210)
- Arm® Cortex®-A72 Dual-core + Arm® Cortex®-A53 Quad-core
- Android 6.0/Linux 4.1.15 (QT 5.5)/Ubuntu 16.04



Fanless cooling system

16GB eMMC

USB 2.0, USB OTG

RS-232/422/485, RJ45

Micro SD/SDHC card slot

Aluminum profile with fin housing

Desktop, wall mounting

-20°C to 60°C operating temperature

Accessories

Standard

2 pin Terminal Block

AC Adapter

Power Cord

Driver CD

Arm Series

Freescall™ Arm® Cortex®-A9 i.MX6 Dual-core



NEW



Model Name	FA30SB3-210	RK30SBS-100
System		
Processor	Arm® Cortex®-A9 i.MX6 Dual-core, 1GHz (Optional for Quad-core)	Arm® Cortex®-A72 Dual-core (Up to 2.0GHz) & Arm® Cortex®-A53 Quad-core (Up to 1.5GHz)
Memory	1GB LPDDR3 (Max 2GB)	DDR3L 1600, SO-DIMM (Max 4GB)
Serial	1 x RS323 (Optional 422/485) (Optional additional 2 x RS-232)	1 x RS-232/422/485 (COM1), HW select
USB	1 x USB A-Type (Host)	2 x USB 3.0 1 x USB 2.0 OTG Micro USB 1 x RS-232/422/485 (COM1), HW select
Expansion Slot	Micro SD/SDHC card slot	MicroSD/SDHC card slot
OS	Android 6.0 Linux 4.1.15 (QT 5.5)	Android 7.1 Linux 4.1.15 (QT 5.5) Ubuntu 18.04
Connectors		
Front Side Connectors	1 x RS-232 (Optional 422/485) optional for the other two RS-232 1 x USB A-type (Host) 1 x RJ45 10/100 (Optional PoE) 1 x Micro SD/SDHC Card Slot 1 x CANBus 1 x USB OTG 1 x Micro HDMI	1 x Giga LAN 1 x Giga LAN supports POE 802.11at 2 x USB 3.0 1 x USB 2.0 OTG Micro USB 1 x RS-232/422/485, HW select 1 x +12V DC Terminal Block
Mechanical		
Dimensions	224 x 47 x 127 mm	224 x 47 x 127 mm
Color	Gray	Gray
Construction	Aluminum profile with fin housing	Aluminum profile with fin housing
Power		
Power Input	+9~24V DC	+12V DC Terminal Block/PoE 48V DC
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Environment		
Operating Temp.	-20°C to 60°C	-20°C to 60°C
Humidity	10% to 90% (non-condensing, RH)	10% to 95% @30°C (Non-condensing, RH)
Mounting	Desktop, wall mount	Desktop, wall mount
Certifications		
Safety	CE, FCC	CE, FCC

Embedded Computing

Product

IoT
Gateway

Systems

Boards &
Modules

Converter

Embedded Computing Fanless Series

Custom configuration



Memory



WiFi



3G/4G LTE



DIDO



DVI



“ **WITHSTANDS HARSH
ENVIRONMENTS. FANLESS.**

”

- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/8/7



Fanless cooling system

2.5" HDD, Mini PCIe SSD

USB 3.0, five USB 2.0

Two RS-232, one RS-232/422/485

Two RJ45

DVI, VGA, HDMI

Desktop, wall mount

0°C to 50°C operating temperature

Application



Assembly Line Machine Controller

“STABLE INDUSTRIAL
COMPUTING IN A SEALED
BOX”

This fanless Box PC was used as part of an industrial assembly line that needed a solution that was low maintenance and reliable as the assembly line needed constant uptime.

Accessories

Standard

Wall Mount Kit

Driver CD

Fanless Box PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	IB70SB7-101
System	
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz
Chipset	Intel Atom® SoC Integrated
Memory	Dual DDR3L 1333/1600 MHz SO-DIMM Slot, Max. 8GB
Expansion Slot	2 x Mini PCIe (1 for WiFi, 1 for WWAN Module)
Graphic Chipset	Integrated Graphic
Ethernet Controller	1000 Base-Tx Gigabit Ethernet Compatible
Audio Codec	Realtek Audio Codec
OS	Windows 10 IoT Enterprise
	Windows 8 Embedded
	Windows 7 Embedded
Connectors	
Power	1 x Power Jack
Ethernet	2 x RJ45 (10/100/1000 Mbps)
Serial Interface	2 x RS-232, 1 x RS-232/422/485 ports, 1 x RS-232 (Optional)
USB	1 x USB 3.0, 3 x USB 2.0, 2 x USB 2.0
VGA	1 x VGA
DVI	1 x DVI (Optional)
HDMI	1 x HDMI (Optional)
Keyboard/Mouse	2 x PS/2
Audio	
Audio	1 x Mic In/Line In/Line Out
User Controls	
LED Indicator	1 x Power/HDD LED
Control Buttons	1 x Power Reset Button
	1 x Power on Button
Power	
Power Input	+12V DC
Power Consumption	40 W (Typ.)
Power Adapter	AC +110V~240V, Universal, ±10%
Mechanical	
Dimensions	264 x 57 x 192 mm
Mounting	Desktop, wall mount
Color	Silver
Construction	Aluminum
Environment	
Operating Temp.	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)
Certifications	
Safety	CE, FCC

Embedded Computing

Standard Box PC

Custom configuration



Memory



Storage



WiFi

Application



Control Room Server PC

“FAST SPEED AND STABLE
PERFORMANCE.”

The box PC was configured to
be a control room embedded
computer as a server PC.

“ **VERSATILE COMPUTING
FOR ANY NEEDS.** ”

- Thermal solution with system fan
- Intel® Core™ i7/i5/i3
- Windows 10/8/7



M.2 SSD, Mini PCIe SSD, 2.5" HDD

Intel® chipset

Four USB 3.0, two USB 2.0

RS-232, two RJ45

HDMI 1.4, DP 1.2

Desktop, wall mount

0°C to 50°C operating temperature

Accessories

AC Adapter

Power Cord

Driver CD

Standard Box PC

Intel® 6th Gen. Core™ i7-7700T, Intel® Core™ i5-7500T, Intel® Core™ i3-7100T, 3.4 GHz
 Intel® 4th Gen. Core™ i7/i5 (Haswell)
 Intel® 3rd Gen. Core™ i7/i5 (Ivy Bridge)
 Intel® Core™ i7/i5 (Arrandale)



Model Name	IK70SB7-111	IH70SB7-111	IV70SB7-111	IC70SB7-111
System				
Processor	Intel® Core™ i7-7700T, 2.9~3.8 GHz Intel® Core™ i5-7500T, 2.7~3.3 GHz Intel® Core™ i3-7100T, 3.4 GHz	Intel® 4th Gen. i7/i5 (Haswell)	Intel® 3rd Gen. i7/i5 (Ivy Bridge)	Intel® i7/i5 with 1066/800 MHz FSB (Arrandale Core)
BIOS	Insyde BIOS	AMI System BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Chipset	Intel® Q170	Intel® 8 series (QM87)	Intel® 7 series (HM76)	Intel® 5 series (HM55)
Memory	1 x SODIMM, Max 16GB DDR4 2400 MHz, default 4GB	2 x SODIMM, Max 16GB DDR3L 1600 MHz	2 x SODIMM, Max 16GB DDR3L 1600 MHz	2 x SODIMM, Max 8GB DDR3 1600 MHz
Storage	2 x SATA III	2 x SATA III	1 x SATA III, 1 x SATA II	2 x SATA II
SSD Interface	1 x M.2 SSD slot (B Key), Max 512 GB	1 x mSATA SSD slot Max 512 GB	1 x mSATA SSD slot	
Expansion Slot	1 x M.2 slot for Wi-Fi (E key)	2 x Mini PCIe (1 for Wi-Fi, 1 for 3G Module), 1 x Mini PCIe Slot (for mSATA SSD), 1 x PCIe (x16)	2 x Mini PCIe (1 for Wi-Fi, 1 for 3G Module) 1 x Mini PCIe Slot (for mSATA SSD) 1 x PCIe (x4) 1 x PCIe (x16)	2 x Mini PCIe (1 for Wi-Fi, 1 for 3G Module) 1 x PCIe (x16)
Graphic Chipset	Intel® HD 530	Intel® HD 4600	Intel® HD 4000	Intel® GM45 Integrated
Ethernet Controller	Intel® I211IT Gigabit + I219LM Gigabit-LAN PHY	Intel® I210IT Gigabit + I218LM Gigabit-LAN PHY	Dual Broadcom BCM57780 GbE	Dual Broadcom BCM57780
Audio	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec
Connectors				
Power	1 x Power Jack (Lockable)	1 x Power Jack (Lockable)	1 x Power Jack (Lockable)	1 x Power Jack (Lockable)
Ethernet	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)
Serial Interface	1 x RS-232/422/485 ports (default RS-232), 1 x RS-232	3 x RS-232 (1 x Optional) 1 x RS-232/422/485	3 x RS-232 (1 x Optional) 1 x RS-232/422/485	3 x RS-232 (1 x Optional) 1 x RS-232/422/485
USB	4 x USB 3.0, 2 x USB 2.0	4 x USB 3.0, 2 x USB 2.0	4 x USB 3.0, 2 x USB 2.0	4 x USB 2.0, 2 x USB 2.0
VGA	-	1 x VGA (male)	1 x VGA (male)	1 x VGA (male)
DVI	-	1 x DVI (Optional)	1 x DVI (Optional)	-
HDMI	1 x HDMI 1.4a	-	-	1 x HDMI (Optional)
DP 1.2	1 x DP 1.2	-	-	-
Keyboard/Mouse	-	2 x PS/2	2 x PS/2	2 x PS/2
User Controls				
LED Indicators	1 x Power/HDD LED	1 x Power/HDD LED	1 x Power/HDD LED	1 x Power/HDD LED
Control Buttons	1 x Power Reset Button 1 x Power on Button	1 x Power Reset Button 1 x Power on Button	1 x Power Reset Button 1 x Power on Button	1 x Power Reset Button 1 x Power on Button
Audio				
Audio	1 x Line out, Mic in	1 x Line in, Line out, Mic in	1 x Line in, Line out, Mic in	1 x Line in, Line out, Mic in
Power				
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	80W (Typ.)	80W (Typ.)	80W (Typ.)	80W (Typ.)
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical				
Dimensions	283 x 192 x 58 mm	264 x 57 x 192 mm	264 x 192 x 57 mm	264 x 192 x 57 mm
Mounting	Desktop, wall mount	Desktop, wall mount	Desktop, wall mount	Desktop, wall mount
Color	Silver	Silver	Silver	Silver
Housing	Aluminum	Aluminum	Aluminum	Aluminum
Environment				
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	5% to 95% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Embedded Computing

Full IP65 Box PC

Custom configuration



Memory



Storage



Expansion Slot



RS-232



Wide Temp.
-20~60°C

Application



Beverage Bottling Plant

"ABLE TO WITHSTAND ANY ENVIRONMENTS."

The Full IP65 Box PC was configured to be a machine controller in a beverage bottling line. The operator wanted to ensure constant uptime, and required waterproof interface for protection against spills.



“ WATERPROOF FOR HARSH ENVIRONMENTS. ”

- Full IP65 enclosure
- Intel® Core™ i5-7200U Kaby Lake
- Intel® Core™ i7-3517UE
- Windows 10/8/7



Intel® chipset

Three USB 2.0

RS-232

Two RJ45

VGA

+9~36V DC power input with isolation

Vibration, shock resistance

Desktop, wall mount

0°C to 50°C operating temperature

Accessories

Standard

Mounting Clips and Screws
VGA Cable

Power Cable with Adapter
LAN Cable

DC Power Cable
Driver CD

Serial Cable

USB Cable

Full IP65 Box PC

Intel® Core™ i5-7200U Kaby Lake
Intel® Core™ i7-3517UE

NEW



Model Name	F65EAC-1K32	F65EAC-1V32
System		
Processor	Intel® Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)	Intel® Core™ i7-3517UE 1.7 GHz
BIOS	Insyde BIOS	AMI 16Mbit Flash
Watchdog Timer		
Chipset	Intel® SoC Integrated	Intel® Express Chipset HM76
Memory	DDR4-2133 SO-DIMM (Max. 16GB)	SO-DIMM DDR3 1333/1600 (Max. 8GB)
Expansion Slot		
Ethernet	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® 82579-LM GbE PHY + Intel® WG82574L GbE LAN
OS	Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows 7 Pro for Embedded system Windows Embedded 8.1 Industrial Windows 10 IoT Enterprise
Connectors		
USB	1 x USB2.0 Type A-Female	1 x USB2.0
Audio	1 x Line in/Line out (Optional)	1 x Line in/Line out (Optional)
Power	1 x Power Input (+9~36V DC)	1 x Power Input
Ethernet	2 x LAN	2 x LAN
Serial Interface	1 x RS-232, 1 x RS-232 (Optional)	1 x RS-232 or RS-422/485 (Optional)
USB	2 x USB2.0	2 x USB2.0
VGA	1 x VGA	1 x VGA
Other	1 x micro SD card socket (Optional) 1 x SIM card socket (Optional) 1 x 8 Channels GPIO/CAN Bus (Optional)	1 x micro SD card socket (Optional) 1 x SIM card socket (Optional) 1 x 8 Channels GPIO/CAN Bus (Optional)
User Controls		
Control Buttons	1 x Power Button	1 x Power Button
Power		
Power Input	+9~36V DC with isolation	+9~36V DC with isolation
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Mechanical		
Dimensions	260.4 x 168 x 50 mm	260.4 x 168 x 50 mm
Mounting	Wall mount, desktop	Wall mount, desktop
Color	Silver	Silver
Housing	Aluminum	Aluminum
Environment		
Operating Temp.	0°C to 50°C (Default), -20°C to 60°C (Optional)	0°C to 50°C (Default), -20°C to 60°C (Optional)
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration
Certifications		
Safety	CE, FCC	CE, FCC

Embedded Computing

2U Rack Server

Custom configuration



Memory



Storage



PCI Slot



GPS Antenna



Application



Electrical Substation Server Room

“FAST SPEED AND STABLE
PERFORMANCE.”

The Rack PC was placed in the substation server room for a smart grid network. Allowed for data to be collected and transmitted on smart grid information.

“

**SERVER ROOM
COMPUTING.**

”

- Intel® Core™ i7
- Fanless, custom cooling system
- Windows 10/8/7



Supports Intel® vPro, AMT 11 remote management

Two 2.5" SSD/HDD, m.2 SSD

Four USB 3.0, two USB 2.0

Three serial ports, two RJ45

HDMI 1.4, display port

Rack mount

IEC 61850-3, IEC60068-2-64, IEC 60068-2-2, CE, FCC compliant

Electroplated steel housing

10°C to 60°C operating temperature

Accessories

Standard

1 x 3 Pin Acrylic protect connector

AC Adapter

Power Cord

Driver CD

2U Rack Server

Intel® Core™ i7-7700T

Intel® Core™ i7-3520M

Intel® Core™ i7-4700MQ

NEW



Model Name	IK7T-RK2U	IV7T-RK2U	IV7W-RK2U Wide Temperature	IH7T-RK2U
System				
Processor	Intel® Core™ i7-7700T 2.9GHz, turbo to 3.8GHz	Intel® Core™ i7-3520M (3M Cache, turbo to 3.6 GHz)	Intel® Core™ i7-3520M (3M Cache, turbo to 3.6 GHz)	Intel® i7-4700MQ 2.4GHz, turbo to 3.4GHz
BIOS	Insyde System BIOS	AMI UEFI BIOS	AMI System BIOS	AMI System BIOS
Chipset	Intel® C236	Intel® 7 series Chipset HM76	Intel® 7 series Chipset HM76	Intel® QM87
Memory	Support Two 204-pin DDR4-2400 SO-DIMM RAM Up to 32GB	DDR3L 1600 SO-DIMM Default 4GB (System Max. 16GB)	DDR3L 1600 SO-DIMM Default 4GB (System Max. 16GB)	DDR3L 1600 SO-DIMM Default 4GB (System Max. 16GB)
Storage	Max. 4 x 2.5" SATAIII HDD (Up to 1TB), Max. 4 x 2.5" SATAIII SSD (Up to 512GB), 1 x m.2 Key B SSD 128gb (Up to 256GB)	2 x 2.5" SATAIII HDD (Up to 1TB) or 2 x 2.5" SATAIII SSD (Up to 512GB), 1 x mSATA SSD 128GB (Up to 256GB), Two 2.5" SATAIII HDD or SSD storages are supporting RAID 0/1	2 x 2.5" SATAIII HDD (Up to 1TB), or 2 x 2.5" SATAIII SSD (Up to 512GB), 1 x mSATA SSD 128GB (Up to 256GB), Two 2.5" SATAIII HDD or SSD storages are supporting RAID 0/1	2 x 2.5" SATAIII HDD (Up to 1TB) or 2 x 2.5" SATAIII SSD (Up to 512GB), 1 x mSATA SSD 128GB (Up to 512GB), Two 2.5" SATAIII HDD or SSD storages are supporting RAID 0/1
Watchdog Timer	10 level	10 level	10 level	10 level
Ethernet Controller	Intel® I211IT Gigabit + I219LM Gigabit-LAN PHY	Broadcom BCM57780 GbE	Broadcom BCM57780 GbE	Intel® Ethernet I210-IT + Intel® Gigabit Ethernet PHY I218-LM
OS	Windows 10 IoT Enterprise	Windows Server 2008 R2 (Optional), Windows Embedded Standard 7	Windows Server 2008 R2 (Optional), Windows Embedded Standard 7	Windows 7 Pro for Embedded Systems 64bit, Windows Embedded 8.1 Industry Pro 64bit, Windows 10 IoT Enterprise, Windows Server 2008 R2 SP1, Windows Server 2012 R2
Connectors				
Power	1 x 3 Pin Acrylic Protected Connector	1 x 3 Pin Acrylic Protected Connector	1 x 3 Pin Acrylic Protected Connector	1 x 3 Pin Acrylic Protected Connector
Ethernet	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
Serial Interface	2 x RS-232, 1 x RS-232/422/485	2 x RS-232 1 x RS-232/422/485, 4 x RS-232 (With special cable)	2 x RS-232 1 x RS-232/422/485, 4 x RS-232 (With special cable)	2 x RS-232 1 x RS-232/422/485, 4 x RS-232 (With special cable)
USB	4 x USB 3.0, 2 x USB 2.0	4 x USB3.0, 2 x USB 2.0	4 x USB3.0, 2 x USB 2.0	4 x USB3.0, 2 x USB 2.0
Audio	1 x Mic in, Line out, Line in	1 x Mic in, Line out, Line in	1 x Mic in, Line out, Line in	1 x Mic in, Line out, Line in
Keyboard/Mouse	2 x PS/2	2 x PS/2	2 x PS/2	2 x PS/2
GPS Antenna	Optional	Optional	Optional	Optional
PCI Slot	PCI Slot (Optional)	2 x PCI Slot (Optional)	2 x PCI Slot (Optional)	2 x PCI Slot (Optional)
HDD Slot	N/A	1 x Dual HDD Slot	1 x Dual HDD Slot	1 x Dual HDD Slot
User Control				
Control Buttons	1 x Power On/Off 1 x Reset Button	1 x Power On/Off 1 x Reset Button	1 x Power On/Off 1 x Reset Button	1 x Power On/Off 1 x Reset Button
Power				
Power Input	+110~240V DC/AC Input with ±20% range	+110~240V DC/AC Input with ±20% range	+110~240V DC/AC Input with ±20% range	+110~240V DC/AC Input with ±20% range
Mechanical				
Dimensions	482.6 x 88 x 356 mm	482.6 x 88 x 356 mm	482.6 x 88 x 356 mm	482.6 x 88 x 356 mm
Mounting	19" rack with 2U height	19" rack with 2U height	19" rack with 2U height	19" rack with 2U height
Color	Black	Black	Black	Black
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design
Housing	Electroplated steel	Electroplated steel	Electroplated steel	Electroplated steel
Environment				
Operating Temp.	-10°C to 60°C	-10°C to 60°C	-40°C to 70°C (Wide range temperature)	-10°C to 60°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Certifications				
Safety	IEC 61850-3, IEC60068-2-64, IEC 60068-2-2, CE, FCC	IEC 61850-3, IEC60068-64, IEC 60068-2-2, CE, FCC	IEC 61850-3, IEC60068-2-64, IEC 60068-2-2, CE, FCC, IEC 61850-3	IEC 61850-3, IEC60068-2-64, IEC 60068-2-2, CE, FCC, IEC 61850-3

Embedded Computing

3.5-inch SBC

Custom configuration



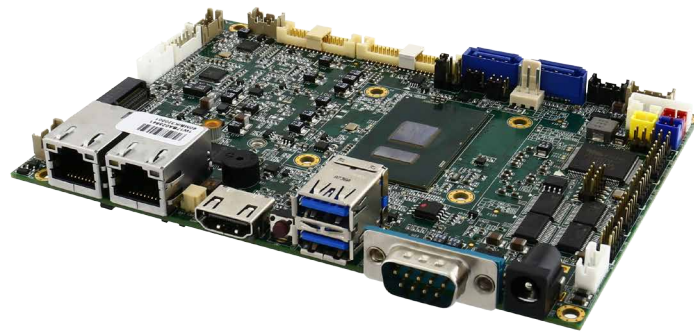
Memory



Storage



Expansion Slot



Application



Embedded Industrial Automation

“SMALL BUT POWERFUL AND EFFICIENT”

The 3.5" Embedded boards are suited for fanless applications where the computing device will be embedded in a range of challenging scenarios.

“ **SMALL, EFFICIENT, POWERFUL** ”

- Fully integrated small-sized single board computer
- Intel® Core™ i5-7200U
- Intel® Celeron® N2930 Bay Trail-M
- Intel® 3rd Gen. Core™ i7
- Windows 10/8/7



3.5" Form Factor (146 mm x 102 mm)

Fanless cooling system

SATA III

Up to three RS-232

USB 3.0, USB 2.0

Two RJ45

VGA, HDMI

RS-232/422/485, 4 x RJ45, VGA

-20°C to 60°C operating temperature

Accessories

Standard

User Manual

Driver CD

3.5-inch SBC

Intel® Core™ i5-7200U

Intel® Celeron® N2930 Bay Trail-M

Intel® 3rd Gen. Core™ i7

NEW



Model Name	IK32	IB32	IV32
System			
Processor	Intel® Core™ i5-7200U 2.5GHz, 3.1GHz	Intel® Celeron® N2930 Bay Trail-M , 1.83GHz	Intel® 3rd Gen. Core™ i7
BIOS	Insyde BIOS	AMI BIOS	AMI BIOS
Chipset	Intel® SoC Integrated	Intel Atom® SoC Integrated	Intel® Express Chipset HM76
Memory	260 pin DDR4-2133, Non-ECC SO-DIMM RAM (max to 16 GB)	1 x SODIMM DDR3L 1600, Max. 8GB	1 x SODIMM DDR3L 1600, Max. 8GB
Expansion Slot	1 x M.2 slot (For PCIe + USB 2.0) 1 x M.2 slot (For SATA III SSD)	1 x Mini PCIe for Wifi 1 x Mini PCIe for SATA SSD	1 x Mini PCIe for Wifi 1 x Mini PCIe for SATA SSD
Ethernet Controller	Intel® HD Graphics 520	Integrated Intel® I210 GbE LAN	Integrated Intel® 82579-LM + WG82574L
Audio Codec	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec
SATA	2 x SATA III	1 x SATA II	1 x SATA II, 1 x SATA III
I/O Chipset	Fintek F81867	Fintek F81866	Fintek F81866
Connectors			
Power	1 x Power Jack	1 x Power Jack	1 x Power Jack
Ethernet	2 x RJ45	2 x RJ45	2 x RJ45
Serial Interface	1 x RS-232/RS-422/RS-485	1 x RS-232/422/485	1 x RS-232/422/485
USB	2 x USB 3.0	1 x USB3.0, 1 x USB2.0	2 x USB3.0
HDMI	1 x HDMI	1 x HDMI	1 x HDMI
IDE	N/A	N/A	N/A
DVI	N/A	N/A	1 x DVI or HDMI
LVDS	1 x LVDS	1 x LVDS	1 x LVDS
Digital I/O	1 x Digital I/O	1 x Digital I/O	1 x Digital I/O
VGA	1 x VGA	1 x VGA	1 x VGA
Audio			
Audio	1 x Audio (Mic in/Line in/Line out)	1 x Audio (Mic in/Line in/Line out)	1 x Audio (Mic in/Line in/Line out)
Power			
Power Input	+12V DC	+12V DC	+12V DC
Mechanical			
Dimensions	146 x 102 mm	146 x 102 mm	146 x 102 mm
Environment			
Operating Temp.	-10°C to 50°C	-20°C to 60°C	-20°C to 60°C
Storage Temp.	-20°C to 60°C	-30°C to 70°C	-30°C to 70°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Embedded Computing

Mini-ITX SBC

Custom configuration



Memory



Storage



Expansion Slot

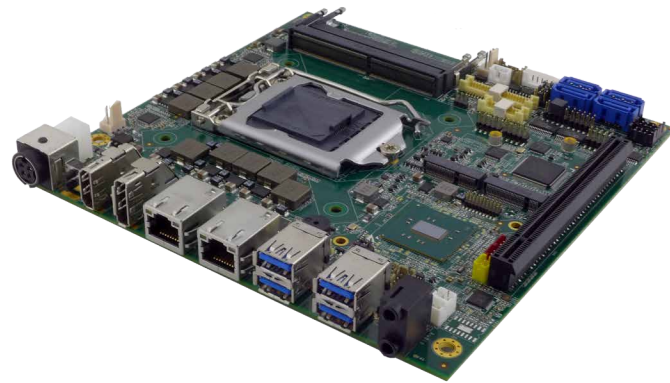
Application



Industrial Automation

“POWERFUL INTEL
CORE PROCESSING IN A
COMPACT EMBEDDED
BOARD”

The Mini-ITX embedded boards are perfectly suited for powerful industrial automation applications with multiple interface.



“ **POWERFUL COMPUTING.** ”

- Fully integrated Mini-ITX single board computer
- Intel® 7th Gen. i7/i5/i3
- Intel® Celeron® N2930 Bay Trail-M
- Intel® Core™ i7/i5/i3
- Windows 10/8/7



Mini-ITX form factor (170mm x 170mm)

Intel® chipset and integrated HD graphics

SATA III, COM, USB 3.0, USB 2.0

Two RJ45, video input, RS-232/422/48

Digital I/O

Expansion slot capabilities

+12V DC power input

-20°C to 60°C operating temperature

Accessories

Standard

User Manual

Driver CD

Mini-ITX SBC

Intel® 7th Gen. i7/i5/i3

Intel® Celeron® N2930 Bay Trail-M

Intel® Core™ i7/i5/i3

NEW



Model Name	IK70	IB70	IC70	IH70	IV70
System					
Processor	Intel® 7th Gen. i7/i5/i3	Intel® Celeron® N2930 Bay Trail-M	Intel® Core™ i7/i5®	Intel® 4th.Gen. i7/i5/i3	Intel® 3rd Gen. i7/i5/i3
BIOS	Insyde BIOS	AMI BIOS	AMI UEFI BIOS	AMI BIOS	AMI UEFI BIOS
Chipset	Intel® H170	Intel Atom® SoC	Intel® 5 HM55	Intel® QM87	Intel® HM76
Memory	1 x DDR4 2400 MHz SO-DIMM max. 32GB	2 x SODIMM DDR3L 1600, max. 8GB	2 x DDR3 1600 SODIMM max. 8GB	2 x SODIMM, max 16GB DDR3L 1600	2 x SODIMM, max 16GB DDR3L 1600
Expansion Slot	1 x M.2 Slot (for SSD) 1 x M.2 Slot (for half size Wifi) 1 x PCIe (x16) slot 1 x PCIe (x4) slot	2 x Mini PCIe (1 for WiFi, 1 for 3G Module) 1 x Mini PCIe Slot (for mSATA SSD)	2 x Mini PCIe (1 for WiFi, 1 for 3G Module), 1 x PCIe (x16)	2 x Mini PCIe (1 for WiFi, 1 for 3G Module) 1 x Mini PCIe Slot (for mSATA SSD) 1 x PCIe (x16)	2 x Mini PCIe (1 for WiFi, 1 for 3G Module) 1 x Mini PCIe Slot (for mSATA SSD) 1 x PCIe (x4) or 1 x PCIe (x16)
Ethernet Controller	Intel® I211IT + I219LM	1000 Base-Tx Gigabit Ethernet Compatible	Broadcom BCM57780 PCIe GbE LAN Controller	Intel® I210IT Gigabit-LAN Controller+ I218LM Gigabit-LAN PHY	1000 Base-Tx Gigabit Ethernet Compatible
Audio	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec
SATA	2 x SATA III	1 x SATA II	2 x SATA II	2 x SATA III	1 x SATA III, 1 x SATA II
I/O Chipset	Fintek F81867	Fintek F81866	W83628UHGH	Fintek F81867	Fintek F81865
Connectors					
Power	1 x Power Jack	1 x Power Jack	1 x Power Jack	1 x Power Jack	1 x Power Jack
Ethernet	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45	2 x RJ45
Serial Interface	-	2 x RS-232 1 x RS-232/422/485	2 x RS-232 1 x RS-232/422/485	2 x RS-232 1 x RS-232/422/485	2 x RS-232 1 x RS-232/422/485
USB	4 x USB 3.0	1 x USB 3.0 3 x USB 2.0	4 x USB 2.0	4 x USB 3.0	4 x USB 3.0
Display output	1 x HDMI, 1 x DP	1 x VGA	1 x VGA	1 x VGA	1 x VGA
Keyboard/Mouse	-	2 x PS/2	2 x PS/2	2 x PS/2	2 x PS/2
Audio	1 x Mic in/Line Out	1 x Audio Jack (Mic in/Line in/Line Out) (Optional)	1 x Audio Jack (Mic in/Line in/Line Out) (Optional)	1 x Audio Jack (Mic in/Line in/Line Out) (Optional)	1 x Audio Jack (Mic in/Line in/Line Out) (Optional)
HDMI	1 x HDMI	1 x HDMI by FFC connector	1 x HDMI connector (Erect Type)	1 x DVI or HDMI	1 x DVI or HDMI
DVI	N/A	1 x DVI by FFC connector	1 x DVI by FFC	1 x DVI or HDMI	1 x DVI or HDMI
LVDS	1 x LVDS	1 x LVDS	1 x LVDS	1 x LVDS	1 x LVDS
Other	1 x eDP	1 x eDP, 1 x LPT 1 x Digital I/O	1 x Digital I/O	1 x eDP, 1 x LPT 1 x Digital I/O	1 x Digital I/O
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Mechanical					
Dimensions	170 x 170 mm	170 x 170 mm	170 x 170 mm	170 x 170 mm	170 x 170 mm
Environment					
Operating Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Storage Temp.	-30°C to 70°C	-30°C to 70°C	-30°C to 70°C	-30°C to 70°C	-30°C to 70°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Embedded Computing

Arm Series SBC

Custom configuration



Memory



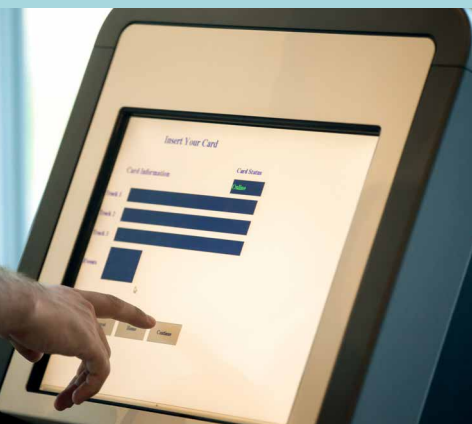
Micro SD Card
Slot



PoE



Application



Self-Service Kiosks

“EASY INTEGRATION”

An interactive Kiosk manufacturer was looking for an Android based solution for their smart kiosks. Winmate provided Arm Box PC with Android 6.0 with multiple interface.

“ ENDLESS SOFTWARE DEVELOPMENT POSSIBILITIES. ”

- Fully integrated small-sized Arm SBC
- Freescale™ Cortex™-A9 i.MX6 Dual-core
- Arm® Cortex®-A72 Dual-core + Arm® Cortex®-A53 Quad-core
- Android/Ubuntu/Linux 4.1.15 (QT 5.5)



3.5" form factor

Onboard 16GB eMMC/mSATA

USB 3.0, USB OTG

RJ45

Micro HDMI

RS-232/422/485, CANBus

+9~24V DC power input

-20°C to 60°C operating temperature

Accessories

Standard

User Manual

Driver CD

Arm Series SBC

Freescall™ i.MX6 Dual-core



Model Name	FA30-210	RK30
System		
Processor	Freescall™ i.MX6 Dual-core 1GHz (Optional for Quad-core)	Dual-core Arm® Cortex®-A72 up to 2.0GHz + Quad-core Arm® Cortex®-A53 up to 1.5GHz
Memory	1GB DDR3	DDR3L 1600, SO-DIMM (Max 4GB)
Expansion Slot	Micro SD/SDHC card slot	Micro SD/SDHC card slot
Ethernet Controller	IEEE 802.3/802.3u 10/100 Base-T	IEEE 802.3/802.3u 10/100 Base-T
OS	Android 6.0 (Default) Linux Ubuntu 16.04 (Optional) Linux 4.1.15 QT 5.5 (Optional)	Android 7.1 Linux 4.1.15 (QT 5.5) Ubuntu 18.04
Storage	Onboard 16GB eMMC/mSATA	Onboard 16GB eMMC/mSATA
Connectors		
Power	1 x Terminal Block 2-pin (DC In)	1 x Terminal Block 2-pin (DC In) 1 x +12V DC Jack
Ethernet	1 x RJ45 10/100/1000 (Optional PoE function)	1 x RJ45 10/100/1000 (Optional PoE function)
Serial Interface	1 x RS-232/422/485 select by software	1 x RS-232/422/485 (COM1), HW select
USB	1 x USB A-type 1 x Mini USB for Debug 1 x USB OTG 4 x USB by 2 pin-header (4 pin)	2 x USB 3.0 1 x USB 2.0 OTG Micro USB 1 x RS-232/422/485 (COM1), HW select
HDMI	1 x Micro HDMI	1 x HDMI connector for test only
Micro SD Card Slot	1 x MicroSD/SDHC card slot	-
CANBus	1 x CANBus	NA
I2C Touch	1 x I2C Touch by pin-header	1 x Touch Connector/1x6-pin (CN7 for 7") 1 x Touch Connector/1x6-pin (CN8 for 10.1")
LVDS	1 x LVDS by pin-header	1 x LVDS Connector (CON4 for 10.1" 1920x1200) 1 x LVDS Connector (CON3 for 7") 1x LVDS Connector (LVDS1 for 10.1" and 15")
Digital I/O	1 x Digital I/O with 3.3V (6-pin GPIO)	1 x Digital I/O/2x7-pin (DIDO1)
Power		
Power Input	+9~24V DC	+12V DC Terminal Block/PoE +48V DC in
Mechanical		
Dimensions	146 x 91.6 mm	146 x 102 mm
Environment		
Operating Tempe.	-20°C to 60°C	-20° to 60°C
Storage Temp.	-40°C to 70°C	-40° to 70°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% @30°C (Non-condensing, RH)
Certifications		
Safety	CE, FCC	CE, FCC

Embedded Computing Converter Boards

Custom configuration



Expansion
Modules



Application



EAC Mini

“FLEXIBLE EXPANSION
MODULES”

The EAC Mini uses various
converter boards for each
customer's specific needs on
the I/O that they need.

“ **EASY CUSTOMIZATION
FOR I/O NEEDS.** ”

- RS-485 to RS-232, USB to COM, Mini PCIE to Dual LAN and various other converters



Flexible customization for your SBC or panel PC needs

Miniature sized

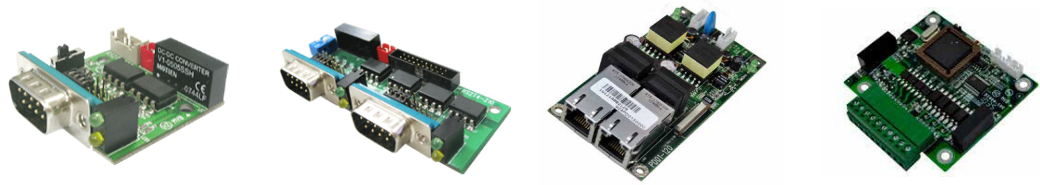
Smooth integration with motherboard

COM, USB, PoE, PCIe, SATA, LAN, DIDO, CANBus

-10°C to 70°C operating temperature

Converter Boards

RS2T4-500/RS2T4-410/PD01/DI4O4



Model Name	RS2T4-500	RS2T4-410	PD01	DI4O4
	Isolated RS-232 to RS-232/RS-422/RS-485 Converter Board	Isolated Dual Port RS-232 to RS-232/RS-422/RS-485 Converter Board	PoE PD Power Board	Isolated 4 Channel digital inputs and 4 Channel digital output Converter Board
System				
Number of Ports	1 x DB9-M	2 x DB9-M		2 x DB9-M
Box Header	• 1 x 5VDC-IN • 1 x RS-232 (2 x 10 pitch 2.54mm)	• 1 x 5VDC-IN • 1 x RS-232 (2 x 10 pitch 2.0mm)	• 2 x 4-pin Box-header Connector for 12v output • 1 x 4-pin Box-header Connector for 12v power input	• 1 x 4-pin Box-header Connector for USB • 1 x 2-pin Box-header Connector for power input
Isolation	Power: 3KV DC Com Port: 2.5KV DC	Power: 3KV DC Com Port: 2.5KV DC		Power: 2KV DC DIDO Port: 1.5KV DC
Data Rate	1200, 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, 115.2k Auto Baud Rate Detection Auto Data Flow	1200, 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, 115.2k Auto Baud Rate Detection Auto Data Flow	10/100/1000 GigaLan	
Power Management				
Power Consumption	0.3W	0.5W		8W
Power Supply	5V 60mA	5V @90mA		
Mechanical				
Dimensions	40.5 x 36 x 16 mm	76 x 30 x 16 mm	50 x 100 x 20 mm	60 x 70 x 20 mm
Environmental				
Operating Temp.	-10°C to 70°C	-10°C to 70°C	-0°C to 50°C	-10°C to 70°C
Storage Temp.	-25°C to 85°C	-25°C to 85°C	-20°C to 80°C	-25°C to 85°C
Humidity Range	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)

Converter Board

MPE2L2/S2MPE-100/UCAN03



Model Name	MPE2L2	S2MPE-100	UCAN03
	Mini PCIe Dual Giga LAN Module	SATA to MiniPCI-E Converter Board	UCAN03 board
System			
Graphic Controller	Silicon Image Sil 1160CTU		
Ethernet	Intel® WG82574L GbE LAN controller		
Connectors			
Input I/O	Mini PCIe (52-pin)	SATA/SATA II	USB connector (2 x 4, Pitch-2.0)
Output I/O	2 x LAN Pin-header (2 x 10 Pin; Pitch 1.25mm)	MiniPCI-E Slot	2 channels CAN BUS (1 x 6 pin, Pitch-5.08)
Power			
Power Input	3.3V from LVDS	+5/12V from PC power supply	5V by USB
Mechanical			
Dimensions	LAN Module Dimension : 50 x 30 x 10 mm Dual LAN adapter Dimension : 49 x 36 x 16 mm	118.5 x 66 mm	70 x 60 mm
Environment			
Operating Temp.	0°C to 60°C	0°C to 60°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

DC to DC Converter Boards



**“ ALL TYPES OF ELECTRICITY
INPUT NEEDS. ”**

- Various DC to DC converter boards for your specific voltage needs
- Isolation DC, wide voltage input, ATX output, multiple output DC power converters



High efficiency DC-DC power supply

Output over-current protection

Simple to install

RoHS Compliant

No minimum load required

Application



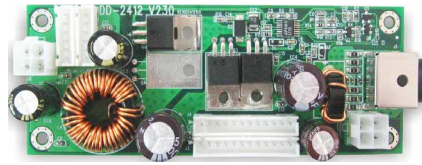
Winmate Full Product Line

**“EASY AND FLEXIBLE
CUSTOMIZATION”**

Winmate’s full range of industrial products allow for customization, including DC power conversion.

DC to DC Converter Board

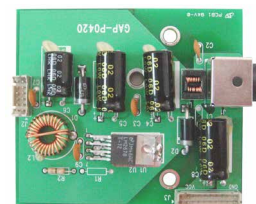
Isolation DC Converter



Model Name	DD-2412
Converter Power Module Specification	
Input	+24V DC
Output Mode	+12V
Output	12V@10A
Dimensions	120 x 45 x 25.6 mm
Total Output (Max.)	Max. Total Output 120W
Operation Temp.	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)
Performance Characteristics	
Ripple & Noise	12V : <120mV
Line Regulation	Less than +/-2.5% at rated load with +/-10% change in input voltage
Load Regulation	Less than ±2%
Power Efficiency	Up to 88%

DC to DC Converter Board

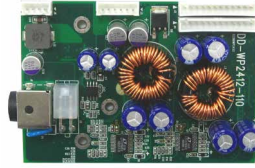
Wide Voltage Input



Model Name	IRT-40	DD-WP12-80	GAP-P120
Converter Power Module Specification			
Input	+9V~36V DC IN	+9V~36V DC	+15V~32V DC
Output Mode	+12V	+12V	+12V
Output	12V@3.3A	12V@6.67A	12V@4A
Dimensions	120 x 48 x 11.8 mm	120 x 45 x 17 mm	70 x 80 mm
Total Output (Max.)	Max. Total Output 40W	Max. Total Output 80W	Max. Total Output 48W
Operation Temp.	0°C to 50°C	0°C to 50°C	0 °C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Performance Characteristics			
Ripple & Noise	12V : <120mV	Less than 120mV	12V : < 240mV
Line Regulation	Less than ±1% at rated +9~36V Input voltage	Less than 1% at rated load with +9V~36V input	
Load Regulation	Less than ±5%	Less than ±5%	
Power Efficiency	Up to 90%	Min. 88% at full load	Up to 90%

DC to DC Converter Board

Multiple Output Converter



Model Name	IRT-WP12-48	DD-WP2412-175	DD-WP12AX-220
Converter Power Module Specification			
Input	+9V~36V DC IN	+9V~32V DC	+18V~28V DC
Output Mode	24V/12V/5V/3.3V	24V/12V/5V	ATX mode
Output	24V@0.1A 12V@1.7A 5V@3.2A 3.3V@3.5A	24V@4.2A 12V@5A 5V@3A	5V@12A; 12V@10A -12V@0.5A 3.3V@10A 5Vsb@12A
Dimensions	120 x 62 x 23 mm	100 x 70 x 23 mm	154 x 55 x 25.6 mm
Total Output (Max.)	Max. Total Output 48W	Max. Total Output 175W	Max. Total Output 220W
Operation Temp.	0°C to 50°C	0 °C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Performance Characteristics			
Ripple & Noise	24V : Less than 240mV 12V : Less than 120mV 5V : Less than 50mV 3.3V : Less than 33mV	24V : Less than 520mV 12V : Less than 120mV 5V : Less than 50mV	5V : <100mV 12V : <120mV -12V : <200mV 3.3V : <66mV 5Vsb : <120mV
Line Regulation	Less than 1% at rated +9~36V input voltage	Less than 1% at rated load with +9V~32V input voltage	Less than ±2.5% at rated load with ±10% change in input voltage
Load Regulation	Less than ±5%	24V : Less than 5% 12V : Less than 5% 5V : Less than 5%	5V : <±5 % +12V : < ±5% -12V : <±5% +3.3V : <±5%
Power Efficiency	80% minimum, measured at nominal input voltage +9~36V and full loading	Min. 85%	88%

DC to DC Converter Board

Multiple Output Converter



Model Name	DD-2412AX	DD-24AX	GAP-P210
Converter Power Module Specification			
Input	+24V DC	+24V DC	+26V~32V DC
Output Mode	ATX mode	ATX mode	24V/12V
Output	5V@12A 12V@10A -12V@0.5A 3.3V@10A 5Vsb@12A	5V@6A 12V@5A -12V@0.5A 3.3V@5A 5Vsb@1A	24V@3.5A 12V@4A
Dimensions	154 x 55 x 25.6 mm	154 x 45 x 25.6 mm	120 x 70 mm
Total Output (Max.)	Max. Total Output 220W	Max. Total Output 120W	Max. Total Output 132W
Operation Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Performance Characteristics			
Ripple & Noise	5V : <100mV 12V : <120mV -12V : <200mV 3.3V : <66mV 5Vsb : <120mV	5V : <100mV 12V : <120mV -12V : <200mV 3.3V : <66mV 5Vsb : <120mV	24V : <480mV 12V : < 240mV
Line Regulation	Less than ±2.5% at rated load with ±10% change in input voltage	Less than ±2.5% at rated load with ±10% change in input voltage	
Load Regulation	5V : <±5 % +12V : <±5% -12V : <±5% +3.3V : <±5%	5V : <±5% +12V : <±5% -12V : <±5% +3.3V : <±5%	
Power Efficiency	88%	88%	Up to 90%

7



A grayscale background image showing laboratory glassware, including several Erlenmeyer flasks and test tubes, some containing liquids. The image is partially obscured by a white diagonal design element.

INDUSTRIAL DISPLAY

Industrial Display

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Industrial Display

Overview

Our prolific experience in LCD technology result in a wide variety of industrial display options for every application. With this vast experience, Winmate is able to offer a wide range of industrial display products with different types of housings and the ability to support multiple mounting options. Versatile mounting options, wide voltage, enhanced panel and touch screen options means the right model to fit your business needs.

Our industrial display include:

- Various housing options
- Resistive, projected capacitive or SAW touch screen
- Rugged design with water and dust proof solution

Standard industrial display product line includes the Chassis, Open Frame, Panel Mount, Rack Mount, Front IP65 and Multitouch series.



Data visualization in tough environments

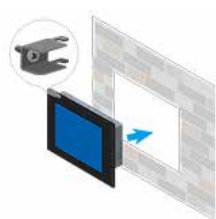
Technology

Winmate industrial displays also provide several kinds of mounting solutions for your own application and environment, such as: panel mount, vehicle mount, rear mount, rack mount, etc.

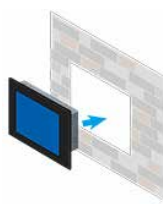
Mounting Solution

Winmate uses 3D drawing software to analyze whether the product mounting is correct and with no interference. Then, the 2D drawing is used to demarcate dimensions and directions.

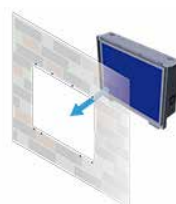
The configurations below show the mounting approaches and kits utilized:



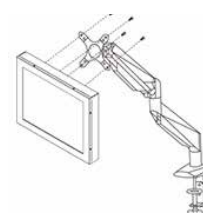
Panel Mount



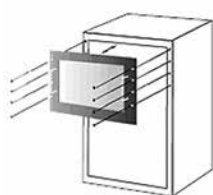
Front IP65



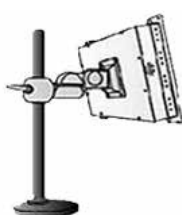
Open Frame



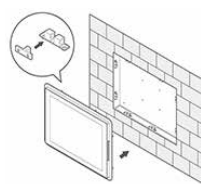
VESA Mount



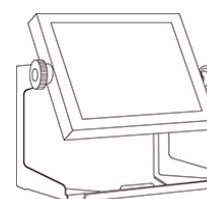
Rack Mount



Pole Mount



Front Size Wall Mount

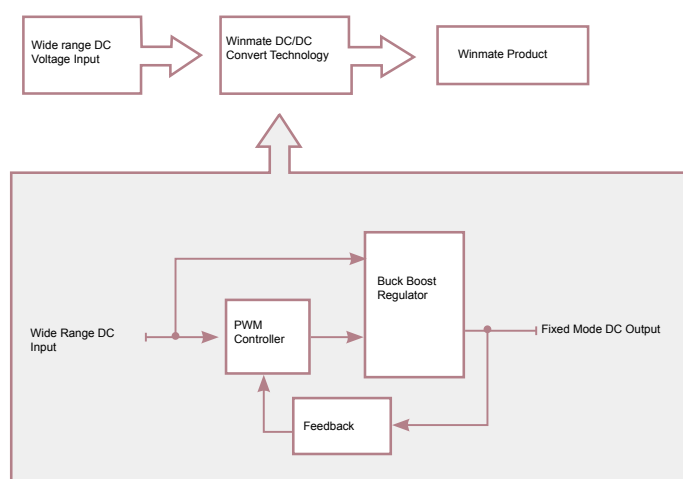


Dash/Yoke Mount

Wide Voltage Solution

The supply of voltage in different application scenarios vary or sometimes appears unstable as a result of using unsuitable power to fit the appliances. Incorrect voltage and current may also damage the electrical components. The wide voltage range solution for power input is designed accordingly to solve the problem and to protect the products by converting different voltage input to meet the ones as required.

Wide Voltage Power Input Diagram



Product

Industrial

Featured

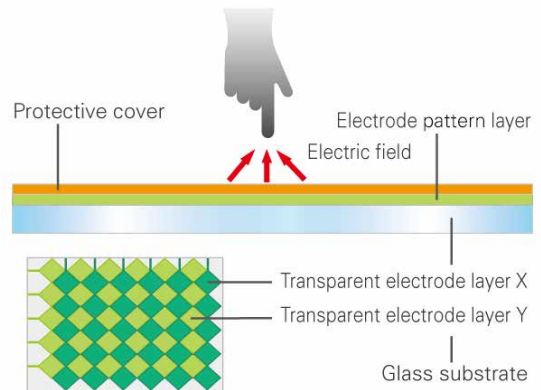
Touchscreen

Projected Capacitive Multitouch

A projected capacitive is composed of a sheet of glass with embedded transparent electrode films and an IC chip, which creates a three dimensional electrostatic field. When a finger comes into contact with the screen, the ratios of the electrical currents change and the computer is able to detect the touch points.

In addition to bare fingers, P-Cap touch screen supports working with gloves.

Projected Capacitive

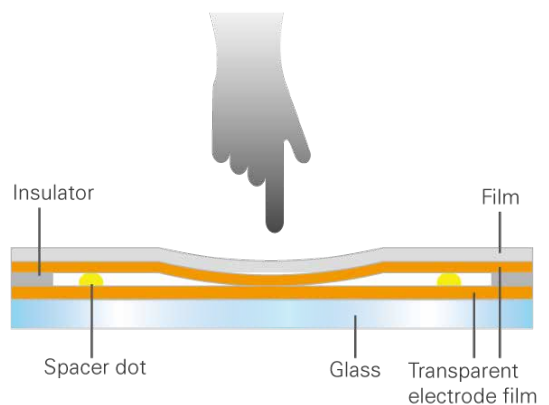


Resistive

A resistive touchscreen is a touch-sensitive computer display composed of two flexible sheets coated with a resistive material and separated by an air gap or microdots.

Resistive touchscreens typically have high resolution, providing accurate touch control. Because the touchscreen responds to pressure on its surface, contact can be made with a finger or any other pointing device.

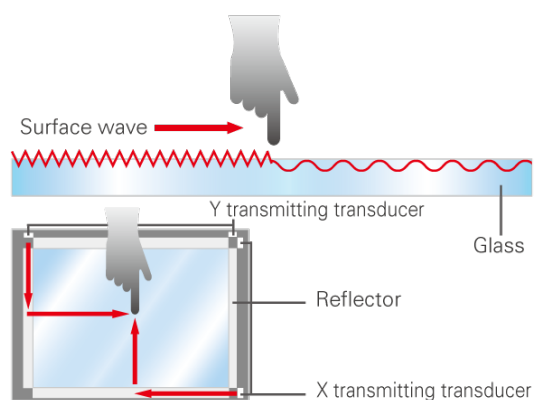
Resistive Touch



Surface Acoustic Wave (SAW) Touch

Flat-screen SecureTouch products are made of extra-tough glass substrates that resist vandalism. These touchscreens incorporate the solid-glass and coating-free construction of Elo's proven IntelliTouch® products. SAW monitors offer easy use and high visibility.

Surface Acoustic Wave (SAW)



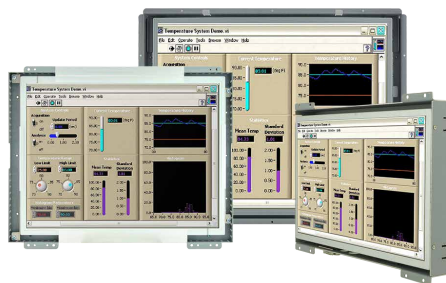
Product Offering

5.7~32" Panel Mount



p.159

5.7~55" Open Frame



p.161

6.5~55.5" Chassis



p.163

8.4~20.1" Rear Mount



p.165

5.7~27" Front IP65



p.167

15"~20.1" Rack Mount



p.169

7~32" Multitouch



p.171

5.7~32" Industrial Display Panel Mount

Custom configuration



Audio and
Speaker



Resistive
Touch



SAW
Touch



DVI-D



S-Video



Composite



Application



Machine Control

“VISUALIZE VALUABLE
INFORMATION.”

Control panel on manufacture
of pharmaceutical and
chemical industry.

“ **RELIABLE DESIGN FOR
FACTORY FLOOR.** ”

- 5.7~32-inch screen
- Panel mount, VESA mount



VGA, HDMI video input

Touch interface USB/RS-232

OSD control 5 keys

VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Panel Mount Display



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
5.7"	R05T100-PMD1HB	115.2 (H) x 86.4 (V)	640x480	300:1 (Typ.)	900 nits	-70,70(H);-40,60(V)	No	+12V DC	15 W (Typ.)	*			
6.5"	R06L200-PMA1	132.48 (H) x 99.36 (V)	640x480	600:1 (Typ.)	700 nits	-80~80(H);-70~70(V)	No	+12V DC	15 W (Typ.)	*			
8.4"	R08L200-PMU1	170.4 (H) x 127.8 (V)	800x600	600:1 (Typ.)	600 nits	-75~75(H);-60~70(V)	Yes	+12V DC	15 W (Typ.)	*		*	
10.1" (17:10)	W10L100-PMH1	222.72 (H) x 125.28 (V)	1024x600	800:1 (Typ.)	450 nits	-80~80(H);-80~75(V)	Yes	+12V DC	10 W (Typ.)	*			
10.4"	R10L600-PMP1	211.2 (H) x 158.4 (V)	800x600	400:1 (Typ.)	600 nits	-80~80(H);-70~70(V)	Yes	+12V DC	15 W (Typ.)	*			
10.4"	R10L600-PMT2	210.4 (H) x 157.8 (V)	1024x768	1200:1 (Typ.)	350 nits	-88~88(H);-88~88(V)	Yes	+12V DC	15 W (Typ.)	*			
10.4"	R10L100-PMP3	211.2(H) x 158.4(V)	640 x 480	700:1 (Typ.)	450 nits	-80~80(H);-60~80(V)	Yes	+12V DC	15 W (Typ.)	*			
12.1"	R12L600-PMM2	245.76 (H) x 184.32 (V)	1024x768	700:1 (Typ.)	500 nits	-80~80(H);-70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
12.1"	R12T600-PML1	246.0 (H) x 184.5 (V)	800x600	700:1 (Typ.)	450 nits	-80~80(H);-70~70(V)	Yes	+12V DC	16 W (Typ.)	*	*	*	*
15"	R15L100-PMA1	304.1 (H) x 228.1 (V)	1024x768	700:1 (Typ.)	550 nits	-80~80(H);-70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
15"	R15L600-PMC3	304.1 (H) x 228.1 (V)	1024x768	700:1 (Typ.)	250 nits	-80~80(H);-70~70(V)	Yes	+12V DC	15 W (Typ.)	*	*	*	*
17"	R17L500-PMM1	337.92 (H) x 270.336 (V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H);-80~80(V)	Yes	+12V DC	36 W (Typ.)	*	*	*	
19"	R19L300-PMM2	376.32(H) x 301.06(V)	1280x1024	2000:1 (Typ.)	300 nits	-89~89(H);-89~89(V)	Yes	+12V DC	54 W (Typ.)	*	*	*	
19"	R19L300-PMM1	304.1(H) x 228.11(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H);-80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*	*	
20.1"	R20L100-PMA2	408.0(H) x 306.0(V)	1600x1200	1400:1 (Typ.)	330 nits	-85~85(H);-85~85(V)	Yes	+12V DC	60 W (Typ.)	*		*	
21.5" (16:9)	W22L100-PMA3	476.64(H) x 268.11(V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H);-89~89(V)	Yes	+12V DC	40 W (Typ.)	*			
22" (16:10)	W22L100-PMM1	473.76(H) x 296.1(V)	1680x1050	1000:1 (Typ.)	250 nits	-85~85(H);-80~80(V)	Yes	+12V DC	25 W (Typ.)	*		*	
23.8" (16:9)	W24L100-PMA2	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H);-89~89(V)	Yes	+12V DC	40 W (Typ.)	*			
24" (16:10)	W24L100-PMS1	518.41(H) x 324.0(V)	1920x1200	1000:1 (Typ.)	300 nits	-89~89(H);-89~89(V)	Yes	+12V DC	40 W (Typ.)				
32" (16:9)	W32L300-PMA3	698.4(H) x 392.85(V)	1920x1080	3000:1 (Typ.)	350 nits	-89~89(H);-89~89(V)	Yes	+24V DC	75 W (Typ.)			*	

Industrial Display

Product

Industrial

Featured

5.7~55" Industrial Display Open Frame

Custom configuration



Audio and
Speaker



Resistive
Touch



SAW
Touch



DVI-D



S-Video



Composite



“

**SLEEK & SLIM OPEN
FRONT FRAME.**

”

- 5.7~55-inch screen
- Rear mount, VESA mount



Vending Machine

“SPEEDS UP PASSENGER
TRAFFIC.”

Winmate open frame display
with touch screen is a part
of a railway ticket vending
machine.

VGA, HDMI video input

Touch interface USB/RS-232

OSD control 5 keys

VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Open Frame Display



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
5.7"	R05T100-OFD1HB	115.2 (H) x 86.4 (V)	640x480	300:1 (Typ.)	900 nits	-70~70(H); -40~60(V)	No	+12V DC	15 W (Typ.)	*			
6.5"	R06L200-OFA1	132.48 (H) x 99.36 (V)	640x480	600:1 (Typ.)	700 nits	-80~80(H); -70~70(V)	No	+12V DC	15 W (Typ.)	*			
7" (16:10)	W07T700-OFA4	152.40 (H) x 91.44 (V)	800x480	1000:1(Typ.)	400 nits	-80~80(H); -80~80(V)	No	+12V DC	10 W (Typ.)	*			
8"	R08T100-OFA1	162.0 (H) x 121.5 (V)	800x600	400:1 (Typ.)	250 nits	-70~70(H); -70~50(V)	Yes	+12V DC	10 W (Typ.)	*			
8.4"	R08L200-OFU1	170.4 (H) x 127.8 (V)	800x600	600:1 (Typ.)	600 nits	-75~75(H); -60~70(V)	Yes	+12V DC	15 W (Typ.)	*		*	
10.1" (17:10)	W10L100-OFH1	222.72 (H) x 125.28 (V)	1024x600	800:1 (Typ.)	450 nits	-80~80(H); -80~75(V)	Yes	+12V DC	10 W (Typ.)	*			
10.4"	R10L100-OFP3	211.2 (H) x 158.4 (V)	640x480	700:1 (Typ.)	450 nits	-80~80(H) ; -60~80(V)	Yes	+12V DC	15 W (Typ.)	*			
10.4"	R10L600-OFP1	211.2 (H) x 158.4 (V)	800x600	400:1 (Typ.)	600 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	15 W (Typ.)	*			
10.4"	R10L100-OFT2	210.4 (H) x 157.8 (V)	1024x768	1200:1 (Typ.)	350 nits	-88~88 (H); -88~88 (V)	Yes	+12V DC	15 W (Typ.)	*		*	
12.1"	R12L600-OFM2	245.76 (H) x 184.32 (V)	1024x768	700:1 (Typ.)	500 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
12.1"	R12T600-OFL1	246.0 (H) x 184.5 (V)	800x600	700:1 (Typ.)	450 nits	-80~80 (H); -75~65 (V)	Yes	+12V DC	16 W (Typ.)	*	*	*	*
12.1" (16:10)	W12L100-OFM9	261.12 (H) x 163.2 (V)	1280x800	1000:1 (Typ.)	400 nits	-88~88 (H); -88~88 (V)	Yes	+12V DC	20 W (Typ.)	*			
15"	R15L600-OFC3	304.1 (H) x 228.1 (V)	1024x768	700:1 (Typ.)	250 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	15 W (Typ.)	*	*	*	*
15"	R15L100-OFA3	304.1 (H) x 228.1 (V)	1024x768	700:1 (Typ.)	400 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	17 W (Typ.)	*	*	*	*
15"	R15L100-OFA1	304.1 (H) x 228.1 (V)	1024x768	700:1 (Typ.)	550 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
15.6" (16:9)	W15L100-OFA2	344.2 (H) x 195.5 (V)	1366x768	500:1 (Typ.)	400 nits	-85~85(H); -80~80(V)	Yes	+12V DC	25 W (Typ.)	*			
17"	S17L500-OFM1	337.92 (H) x 270.336 (V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC	36 W (Typ.)	*	*	*	
18.5" (16:9)	W18L100-OFA2	409.8 (H) x 230.4 (V)	1366x768	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	19 W (Typ.)	*			
19"	R19L300-OFM2	376.3 (H) x 301.1 (V)	1280x1024	2000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	12V DC	54 W (Typ.)	*	*	*	
19"	R19L300-OFM1	376.3 (H) x 301.1 (V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*	*	
19"	R19L300-OFA1	376.32 (H) x 301.06 (V)	1280x1024	500:1 (Typ.)	400 nits	-85~85(H); -80~80(V)	Yes	+12V DC	54 W (Typ.)	*	*	*	
20.1"	R20L100-OFA2	408.0 (H) x 306.0 (V)	1600x1200	1400:1 (Typ.)	330 nits	-85~85(H); -85~85(V)	Yes	+12V DC	60 W (Typ.)	*		*	
21.5" (16:9)	W22L100-OFA3	476.64 (H) x 268.11 (V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)	*			
22" (16:10)	W22L100-OFM1	473.76 (H) x 296.1 (V)	1680x1050	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	25 W (Typ.)	*		*	
23.1"	R23L100-OFS1	470.4 (H) x 352.8 (V)	1600x1200	600:1 (Typ.)	500 nits	-85~85(H); -85~85(V)	Yes	+12V DC	80 W (Typ.)				
23.8" (16:9)	W24L100-OFA2	527.04 (H) x 296.46 (V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)	*		*	
24" (16:10)	W24L100-OFS1	518.4 (H) x 324 (V)	1920x1200	1000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)				
27" (16:9)	W27L100-OFA1	596.7 (H) x 336.5 (V)	1920x1080	3000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)			*	
32" (16:9)	W32L300-OFA3	698.4 (H) x 392.85(V)	1920x1080	4000:1 (Typ.)	350 nits	-89~89(H); -89~89(V)	Yes	+24V DC	75 W (Typ.)			*	
42" (16:9)	W42L300-OFA3	930.24 (H) x 523.26 (V)	1920x1080	2500:1 (Typ.)	500 nits	-89~89(H); -89~89(V)	Yes	+24V DC	100 W (Typ.)			*	
55" (16:9)	W55L100-OFL2	1209.6 (H) x 680.4 (V)	1920x1080	4000:1 (Typ.)	500 nits	-89~89(H); -89~89(V)	Yes	+100~240V AC	145W (Typ.)				

6.5~55" Industrial Display Chassis

Custom configuration



Housing



Resistive Touch



SAW Touch



DVI-D



S-Video



Composite



Audio and Speaker



Application



Pharmacy Information Display

“VERSATILE MOUNTING SOLUTION.”

Chassis LCD installed on the VESA arm displays order information in the pharmacy back-end.

“FIT SEAMLESSLY INTO SPACE CONSTRICTED APPLICATIONS.”

- 6.5~55-inch screen
- Panel mount, VESA mount



VGA, HDMI video input

Touch interface USB/RS-232

OSD control 5 keys

VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Chassis Display



Size	Model Name	Active Display Area (mm)	Number of Pixels	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Power Input	Optional DVI Input	Resistive	Capacitive	SAW	IR
6.5"	R06L200-CHA1	132.48(H) x 99.36(V)	640x480	600:1(Typ.)	700 nits	-80~80(H); -70~70(V)	+12V DC	No	*			
8"	R08T100-CHA1	162.0(W) x 121.5(H)	800x600	400:1(Typ.)	250 nits	-70~70(H); -70~50(V)	+12V DC	Yes	*			
8.4"	R08L200-CHU1	170.4(H) x 127.8(V)	800x600	600:1(Typ.)	600 nits	-75~75(H); -60~70(V)	+12V DC	Yes	*		*	
10.1" (17:10)	W10L100-CHH1	222.72(H) x 125.28(V)	1024x600	800:1(Typ.)	450 nits	-80~80(H); -80~75(V)	12V DC+	Yes	*			
10.1" (16:10)	W10L100-CHA1	216.81(H) x 135.50(V)	1920x1200	750:1(Typ.)	700 nits	-89~89(H); -89~89(V)	+12V DC	Yes	*			
10.4"	R10L600-CHP1	211.2(H) x 158.4(V)	800x600	400:1(Typ.)	600 nits	-80~80(H); -70~70(V)	+12V DC	Yes	*	*		
10.4"	R10L100-CHT2	210.4(H) x 157.8(V)	1024x768	1200:1(Typ.)	350 nits	-88~88(H); -88~88(V)	+12V DC	Yes	*	*		
12.1"	R12T600-CHL1	246.0(H) x 184.5(V)	800x600	700:1(Typ.)	450 nits	-80~80(H); -75~65(V)	+12V DC	Yes	*			
12.1"	R12L600-CHM2	245.76(H) x 184.32(V)	1024x768	700:1(Typ.)	500 nits	-80~80(H); -70~70(V)	+12V DC	Yes	*	*		
12.1" (16:10)	W12L100-CHM9	261.12(H) x 163.2(V)	1280x800	1000:1(Typ.)	400 nits	-88~88(H); -88~88(V)	+12V DC	Yes	*	*		
15"	R15L600-CHC3	304.1(H) x 228.1(V)	1024x768	700:1(Typ.)	250 nits	-80~80(H); -70~70(V)	12V DC+	Yes	*	*		
15"	R15L100-CHA1	304.128(H) x 228.096(V)	1024x768	700:1(Typ.)	550 nits	-80~80(H); -70~70(V)	+12V DC	Yes	*			
15"	R15L100-CHA3	304.128(H) x 228.096(V)	1024x768	700:1(Typ.)	400 nits	-80~80(H); -70~70(V)	+12V DC	Yes	*			
15.6" (16:9)	W15L100-CHA2	344.232(H) x 195.536(V)	1366x768	500:1(Typ.)	400 nits	-85~85(H); -80~80(V)	12V DC+	Yes	*			
17"	R17L500-CHM1	337.92(H) x 270.336(V)	1280x1024	1000:1(Typ.)	350 nits	-85~85(H); -80~80(V)	+12V DC	Yes	*	*		
19"	R19L300-CHM1	376.32(H) x 301.06(V)	1280x1024	1000:1(Typ.)	250 nits	-85~85(H); -80~80(V)	+12V DC	Yes	*	*		
19"	R19L300-CHA1	376.32(H) x 301.06(V)	1280x1024	1000:1(Typ.)	400 nits	-85~85(H); -80~80(V)	+12V DC	Yes	*	*		
19"	R19L300-CHM2	376.32(H) x 301.056(V)	1280x1024	2000:1(Typ.)	300 nits	-89~89(H); -89~89(V)	+12V DC	Yes	*	*		
20.1"	R20L100-CHA2	408(H) x 306(V)	1600x1200	1400:1(Typ.)	330 nits	-85~85(H); -85~85(V)	+12V DC	Yes	*		*	
21.5" (16:9)	W22L100-CHA3	476.64(H) x 268.11(V)	1920x1080	3000:1(Typ.)	250 nits	-89~89(H); -89~89(V)	+12V DC	Yes	*			
22" (16:10)	W22L100-CHM1	473.76(H) x 296.1(V)	1680x1050	1000:1(Typ.)	250 nits	-85~85(H); -80~80(V)	+12V DC	Yes	*		*	
23.1"	R23L100-CHS1	470.4(H) x 352.8(V)	1600x1200	600:1(Typ.)	500 nits	-85~85(H); -85~85(V)	+12V DC	Yes			*	
23.8" (16:9)	W24L100-CHA2	527.04(H) x 296.46(V)	1920x1080	3000:1(Typ.)	250 nits	-89~89(H); -89~89(V)	+12V DC	Yes	*			
24" (16:10)	W24L100-CHS1	518.4(H) x 324(V)	1920x1200	1000:1(Typ.)	300 nits	-89~89(H); -89~89(V)	+12V DC	Yes				
27" (16:9)	W27L100-CHA1	597.6(H) x 336.15(V)	1920x1080	2000:1(Typ.)	300 nits	-89~89(H); -89~89(V)	+12V DC	Yes			*	
30" (16:10)	W30L100-CHL1	641.28(H) x 400.8(V)	2560x1600	1000:1(Typ.)	350 nits	-89~89(H); -89~89(V)	+12V DC	Yes			*	
32" (16:9)	W32L300-CHA3	698.40(H) x 392.85(V)	1920x1080	3000:1(Typ.)	350 nits	-89~89(H); -89~89(V)	+24V DC	Yes				*
42" (16:9)	W42L100-OML2	930.24(H) x 523.26(V)	1920x1080	4000:1(Typ.)	450 nits	-89~89(H); -89~89(V)	+100~240V AC	Yes				
55" (16:9)	W55L100-OML2	1209.6(H) x 680.4(V)	1920x1080	4000:1(Typ.)	500 nits	-89~89(H); -89~89(V)	+100~240V AC	Yes				

8.4~20.1" Industrial Display Rear Mount

Custom configuration



Housing



Resistive
Touch



SAW
Touch



DVI-D



S-Video



Composite



Audio and
Speaker



“

**WHERE SAFETY IS A
PRIORITY.**

”

- 8.4~20.1-inch screen
- Rear mount



VGA, HDMI video input

Touch interface USB/RS-232

OSD control 5 keys

VESA mount

0°C to 50°C operating temperature

ATM Machine

“RELIABLE AND SECURE
PAYMENTS.”

Rear mount LCD is secured
from the back and leaves no
sides of the panel outside.



Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Rear Mount Display



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
8.4"	R08L200-RMU1	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	600 nits	-75~75(H); -60~70(V)	No	+12V DC	15 W (Typ.)	*		*	
10.4"	R10L600-RMP1	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	600 nits	-70~70(H); -70~60(V)	No	+12V DC	15 W (Typ.)	*			
12.1"	R12T600-RML1	246.0(H) x 184.5(V)	800x600	700:1 (Typ.)	450 nits	-80~80(H); -75~65(V)	No	+12V DC	15 W (Typ.)	*	*	*	*
12.1"	R12L600-RMM2	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	500 nits	-80~80(H); -70~70(V)	No	+12V DC	20 W (Typ.)	*	*	*	*
15"	R15L600-RMA1	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	550 nits	-80~80(H); -70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
15"	R15L600-RMC3	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	250 nits	-80~80(H); -70~70(V)	Yes	+12V DC	15 W (Typ.)	*	*	*	*
17"	S17L500-RMM1	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC	36 W (Typ.)	*	*	*	*
19"	R19L300-RMM2	376.32(H) x 301.06(V)	1280x1024	2000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	54 W (Typ.)	*	*	*	
19"	R19L300-RMM1	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*	*	*
20.1"	R20L100-RMA2	408.0(H) x 306.0(V)	1600x1200	1400:1 (Typ.)	330 nits	-85~85(H); -85~85(V)	Yes	+12V DC	60 W (Typ.)	*		*	

Industrial Display

Product

Industrial

Featured

5.7~27" Industrial Display

Front IP65

Custom configuration



Application



Beautician cabinet

“WATERPROOF FRONT PANEL.”

Designed to be rugged, front IP65- displays are ideal for use in wet and dusty environments.

FOR WET AND DUSTY ENVIRONMENTS.

- 5.7~27-inch screen
- Panel mount, VESA mount



VGA, HDMI video input

Touch interface USB/RS-232

OSD control 5 key

VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Front IP65 Display



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR≥10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
5.7"	R05T100-IPD1HB	115.2(H) x 86.4(V)	640x480	300:1 (Typ.)	900 nits	-70~70(H); -40~60(V)	No	+12V DC	15 W (Typ.)	*			
6.5"	R06L200-IPA1	132.48(H) x 99.36(V)	640x480	600:1 (Typ.)	700 nits	-80~80(H); -70~70(V)	No	+12V DC	10 W (Typ.)	*			
8.4"	R08L200-IPU1	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	600 nits	-75~75(H); -60~70(V)	No	+12V DC	15 W (Typ.)	*			
10.1" (17:10)	W10L100-IPH1	222.72(H) x 125.28(V)	1024x600	800:1 (Typ.)	450 nits	-80~80(H); -80~75(V)	No	+12V DC	10 W (Typ.)	*			
10.4"	R10L600-IPP1	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	600 nits	-70~70(H); -70~60(V)	No	+12V DC	15 W (Typ.)	*			
10.4"	R10L100-IPT2	210.4(H) x 157.8(V)	1024x768	1200:1 (Typ.)	350 nits	-88~88(H); -88~88(V)	No	+12V DC	15 W (Typ.)	*	*		
12.1"	R12L600-IPM2	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	500 nits	-80~80(H); -70~70(V)	No	+12V DC	20 W (Typ.)	*	*		*
12.1"	R12T600-IPL1	246.0(H) x 184.5(V)	800x600	700:1 (Typ.)	450 nits	-80~80(H); -75~65(V)	No	+12V DC	15 W (Typ.)	*	*		*
15"	R15L100-IPA1	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	550 nits	-80~80(H); -70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*		*
15"	R15L600-IPC3	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	250 nits	-80~80(H); -70~70(V)	Yes	+12V DC	15 W (Typ.)	*	*		
17"	S17L500-IPM1	337.92(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*		*
19"	R19L300-IPM1	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*		
19"	R19L300-IPM2	376.32(H) x 301.06(V)	1280x1024	2000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	54 W (Typ.)	*	*		
20.1"	R20L100-IPA2	408.0(H) x 306.0(V)	1600x1200	1400:1 (Typ.)	330 nits	-85~85(H); -85~85(V)	Yes	+12V DC	60 W (Typ.)	*			
21.5" (16:9)	W22L100-IPA3	476.64(H) x 268.11(V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)	*			
22" (16:10)	W22L100-IPM1	473.76(H) x 296.1(V)	1680x1050	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	25 W (Typ.)	*	*		
23.8" (16:9)	W24L100-IPA2	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)	*			
24" (16:10)	W24L100-IPS1	518.14(H) x 324(V)	1920x1200	1000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)				
27" (16:9)	W27L100-IPA1	597.6(H) x 336.15(V)	1920x1080	3000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)				
32" (16:9)	W32L100-IPA3	698.4(H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000	-89~89(H); -89~89(V)	Yes	+12V DC	75W (Typ.)				

Industrial Display

Product

Industrial

Featured

15~20.1" Industrial Display Rack Mount

Custom configuration



Audio and
Speaker



Resistive
Touch



SAW
Touch



DVI-D



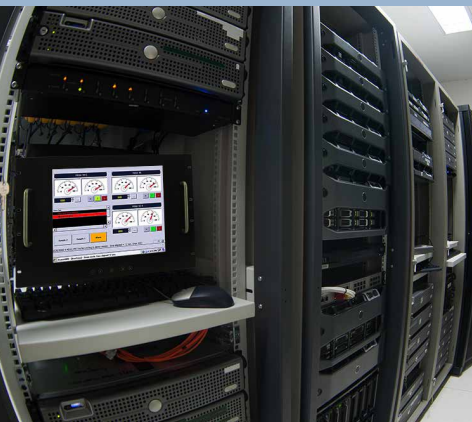
S-Video



Composite



“ **FOR INSTALLATION IN
VERTICAL SURFACES.** ”



Network Server

“SUPERIOR
FUNCTIONALITY.”

Being able to be mounted to walls, shelves, and other vertical surfaces, Winmate's 15-inch rack mount display is able to visualize data from network servers in a data room.

- 15~20.1-inch screen
- Rack mount



VGA, HDMI video input

Touch interface USB/RS-232

OSD control 5 keys

VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Rack Mount Display



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR≥10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
15"	R15L600-RKC3	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	250 nits	-80~80(H); -70~70(V)	Yes	+12V DC	15 W (Typ.)	*	*	*	
15"	R15L100-RKA1	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	550 nits	-80~80(H); -70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
17"	R17L500-RKM1	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*	*	*
19"	R19L300-RKM1	376.32(H) x 301.056(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*	*	*	*
19"	R19L300-RKM2	376.32(H) x 301.056(V)	1280x1024	2000:1 (Typ.)	300 nits	-89~89(H); -89~89(V)	Yes	+12V DC	54 W (Typ.)	*	*	*	
20.1"	R20L100-RKA2	408.0(H) x 306.0(V)	1600x1200	1400:1 (Typ.)	330 nits	-85~85(H); -85~85(V)	Yes	+12V DC	60 W (Typ.)	*		*	

Industrial Display

Product

Industrial

Featured

7~32" Industrial Display Multitouch

Custom configuration



Housing



Resistive
Touch



Audio and
Speaker



DVI-D



S-Video



Composite



Application



In-Vehicle Navigation

"ROUTE OPTIMIZATION
AND EASY NAVIGATION."

Installed inside a tractor,
information and navigation
display helps to optimize
harvesting wheat field.

“
SLEEK AND STYLISH DESIGN.
”

- 7~32-inch screen
- Projected capacitive touch screen
- Chassis, panel mount, open frame



VGA, HDMI video input

Touch interface USB

OSD control 5 key

VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

Adapter

Touch Drive CD

VGA Cable 1.8m

VGA Cable 1.8m

Multitouch Display



Chassis

Size	Model Name	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Display Colors	Power Input	Power Consumption	Capacitive
7" (17:10)	W07L100-PCO1	1024 x 600	700:1 (Typ.)	1000 nits	-75~75 (H); -75~70 (V)	16.2M	+12V DC	10W (Typ.)	*
7" (17:10)	W07L100-PCT1	1024 x 600	500:1 (Typ.)	320 nits	-75~75 (H); -75~70 (V)	16.7M	+12V DC	10W (Typ.)	*
10.1" (17:10)	W10L100-PCH1	1024 x 600	800:1 (Typ.)	450 nits	-75~80 (H); -80~80 (V)	16.7M	+12V DC	10W (Typ.)	*
10.1" (16:10)	W10L100-PCH2	1280 x 800	800:1 (Typ.)	350 nits	-85~85 (H); -85~85 (V)	16.7M	+12V DC	10W (Typ.)	*
10.4"	R10L100-PCT2	1024 x 768	1200:1 (Typ.)	350 nits	-88~88 (H); -88~88 (V)	16.2M	+12V DC	10W (Typ.)	*
12.1"	R12L100-PCM2	1024 x 768	700:1 (Typ.)	500 nits	-80~80 (H); -70~70 (V)	16.2M	+12V DC	12W (Typ.)	*
15"	R15L600-PCC3	1024 x 768	700:1 (Typ.)	1000 nits	-80~80 (H); -70~70 (V)	16.2M	+12V DC	25W (Typ.)	*
15"	R15L100-PTC3	1024 x 768	700:1 (Typ.)	300 nits	-80~80 (H); -80~80 (V)	16.2M	+12V DC	10W (Typ.)	*
15.6" (16:9)	W15L100-PTA3	1920 x 1080	700:1 (Typ.)	300 nits	-85~85 (H); -85~85 (V)	16.2M	+12V DC	10W (Typ.)	*
19"	R19L300-PCM1	1280 x 1024	1000:1 (Typ.)	250 nits	-85~85 (H); -80~80 (V)	16.7M	+12V DC	27W (Typ.)	*
21.5" (16:9)	W22L100-PCA3	1920 x 1080	3000:1 (Typ.)	250 nits	-89~89 (H); -89~89 (V)	16.7M	+12V DC	40W (Typ.)	*
24" (16:9)	W24L100-PCA2	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	16.7M	+12V DC	65W (Typ.)	*
32" (16:9)	W32L100-PCA3	1920 x 1080	3000:1 (Typ.)	350 nits	-89~89 (H); -89~89 (V)	16.7M	+100~240V AC	75W (Typ.)	*

Front IP65



Size	Model Name	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Capacitive
7" (17:10)	W07L100-EHT1	1024 x 600	500:1 (Typ.)	320 nits	-75~75(H); -75~70(V)	No	+12V DC	10 W (Typ.)	*
8.4"	R08L200-PPU1	800 x 600	600:1 (Typ.)	600 nits	-75~75(H); -60~70(V)	Yes	+12V DC	15 W (Typ.)	*
10.1" (16:10)	W10L100-EHH2	1280 x 800	300:1 (Typ.)	800 nits	-85~85(H); -85~85(V)	Yes	+12V DC	10 W (Typ.)	*
10.4"	R10L100-PPT2	1024 x 768	1200:1 (Typ.)	350 nits	-88~88(H); -88~88(V)	Yes	+12V DC	15 W (Typ.)	*
15"	R15L600-PPC3	1024 x 768	700:1 (Typ.)	250 nits	-80~80(H); -70~70(V)	Yes	+12V DC	15 W (Typ.)	*
15.6" (16:9)	W15L100-PPA4	1920 x 1080	800:1 (Typ.)	300 nits	-85~85(H); -85~85(V)	Yes	+12V DC	25 W (Typ.)	*
19"	R19L300-PPM1	1280 x 1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	*
21.5" (16:9)	W22L100-PPA3	1920 x 1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	Yes	+12V DC	40 W (Typ.)	*
24" (16:9)	W24L100-PPA2	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	65 W (Typ.)	*
27" (16:9)	W27L100-PPA1	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	70 W (Typ.)	*
32" (16:9)	W32L100-PPA3	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	75 W (Typ.)	*

Open Frame



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Capacitive
7" (17:10)	W07L100-POT1	153.6 (H) x 90 (V)	1024 x 600	1000:1 (Typ.)	320 nits	-70~75 (H); -75~75 (V)	Yes	+12V DC	10W (Typ.)	*
10.1" (16:10)	W10L100-POH2	216.96 (H) x 135.60 (V)	1280 x 800	800:1 (Typ.)	350 nits	-85~85(H); -85~85(V)	Yes	+12V DC	10W (Typ.)	*
10.1" (16:9)	W10L100-POA1	216.57 (H) x 135.36 (V)	1920 x 1080	800:1 (Typ.)	700 nits	-89~89 (H); -89~89 (V)	Yes	+12V DC	10W (Typ.)	*
15"	R15L100-POC3	304.1 (H) x 228.1 (V)	1024 x 768	700:1 (Typ.)	250 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	15W (Typ.)	*
17"	R17L100-POM1	337.920 (H) x 270.336 (V)	1280 x 1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC	36W (Typ.)	*
19"	R19L100-POM1	376.32 (H) x 301.06 (V)	1280 x 1024	1000:1 (Typ.)	250 nits	-85~85 (H); -80~80 (V)	Yes	+12V DC	27W (Typ.)	*
21.5" (16:9)	W22L100-POA3	476.64 (H) x 269.11 (V)	1920 x 1080	3000:1 (Typ.)	250 nits	-89~89 (H); -89~89 (V)	Yes	+12V DC	40W (Typ.)	*
24" (16:9)	W24L100-POA2	527.04(H) x 296.46(V)	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes	+12V DC	65W (Typ.)	*
27" (16:9)	W27L100-POA1	597.6 (H) x 336.15 (V)	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes	+12V DC	70W (Typ.)	*
32" (16:9)	W32L100-POA3	698.4 (H) x 392.85(V)	1920 x 1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes	+12V DC	75W (Typ.)	*

Featured Display

Overview

Rich experience in LCD technologies allow Winmate to manufacture application-focused display solutions: wide power and temperature range, transfective, high brightness, bar-type display and LCD kits.

Our featured displays find their application usage in industrial automation, outdoor kiosks, human machine interfaces (HMI), heavy duty vehicles and various other situations. Advanced solutions for every application!



Product

Industrial

Featured

Product Offering

Featured display series have different special features such as super high resolution, high brightness or full IP65. This wide product range provides an excellent choice and performance for a variety of different applications.

Featured Industrial Display

7"~18.5" USB Type-C



10.1"~15" PoE Touch Display



24"/32" 4K UHD Display



10.1"~32" SDI Display



10.4"~21.5" Stainless IP69K/IP67/IP65



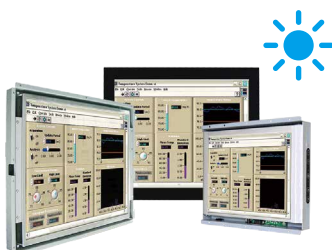
7"~32" Multitouch



8.4"~20.1" SDI Solution



5.7"~32" Sunlight Readable



15"~20.1" Wide Temperature



8.4"~19" G-WIN Rugged



17"~19" 1U Console Drawer



19"~38" Bar-Type



Product

Industrial

Featured

7~18.5" Display USB Type-C

Custom configuration



P-Cap Touch



Audio and
Speaker



Housing



High
Brightness



Application



Truck Cabin

"SAVING CABLING SPACE
WITH SINGLE CABLE"

The USB Type-C display
connected to the EAC Mini-C
IoT gateway is installed in a
vehicle cabin .

“
SINGLE CABLE SOLUTION.
”

- 7~18.5-inch screen
- USB Type-C port
- IP65 and open frame housing



USB Type-C connector for power, touch, video input

USB 5V/3A power delivery

P-Cap multitouch

OSD control 5 keys

0°C to 50°C operating temperature

Accessories

User Manual

USB Type-C Cable

USB Type-C Display

Open Frame



Model Name	7" (17:10) W07L100-POT1-C	10.1" (16:10) W10L100-POH2-C	10.4" R10L100-POT2-C	12.1" R12L100-POM2-C	15" R15L600-POC3-C
Display					
Resolution	1024 x 600	1280 x 800	1024x768	1024x768	1024x768
Brightness	320 nits	350 nits	350 nits	500 nits	250 nits
Contrast Ratio	500:1 (Typ.)	800:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)	2000:1 (Typ.)
Active Area	153.6 (H) x 90 (V)	216.96 (H) x 135.6 (V)	210.4 (H) x 157.8 (V)	245.76 (H) x 184.32 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-75~75 (H) ; -75~70 (V)	-85~85 (H) ; -85~85 (V)	-88~88 (H) ; -88~88 (V)	-80~80 (H) ; -70~70 (V)	-88~88 (H) ; -88~8 (V)
Display Color	16.7M	16.7M	16.2M	16.2M	16.2M
Touch	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)
Connectors					
Video Input	1 x USB Type-C connector	1 x USB Type-C connector	1 x USB Type-C connector	1 x USB Type-C connector	1 x USB Type-C connector
User Controls					
Control Buttons	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter
Audio					
Audio	2 x Speaker (Optional)	2 x Speaker (Optional)	2 x Speaker (Optional)	2 x Speaker (Optional)	2 x Speaker (Optional)
Environment					
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Power					
Power Input	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)
Power Consumption	6W (Typ.)	10W (Typ.)	9W (Typ.)	12W (Typ.)	12W (Typ.)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Display

Product

Industrial

Featured

USB Type-C Display

Stand Alone

Industrial Display

Product

Industrial

Featured



Model Name	7" (17:10)	7" (17:10)	10.1" (16:10)	10.1" (16:9)	10.4"
	W07L100-GCT1-C	W07L100-GCO1HB-C	W10L100-GCH2-C	W10L100-GCH1HB-C	R10L100-GCT2-C
Display					
Resolution	1024 x 600	1024 x 600	1280 x 800	1024 x 600	1024 x 768
Brightness	320 nits	1000 nits	350 nits	800 nits	350 nits
Contrast Ratio	1000:1 (Typ.)	700:1 (Typ.)	800:1 (Typ.)	800:1 (Typ.)	1200:1 (Typ.)
Active Area	153.6 (H) x 90 (V)	153.6 (H) x 90 (V)	216.96 (H) x 135.6 (V)	222.72 (H) x 125.28 (V)	210.4 (H) x 157.8 (V)
Viewing Angle	-70~75 (H) ; -75~75 (V)	-75~75 (H) ; -75~70 (V)	-85~85 (H) ; -85~85 (V)	-80~80 (H) ; -80~75 (V)	-88~88 (H) ; -88~88 (V)
Display Color	16.7M	16.7M	16.7M	16.7M	16.2M
Touch	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)
Connectors					
Video Input	1 x USB Type-C connector	1 x USB Type-C connector	1 x USB Type-C connector	1 x USB Type-C connector	1 x USB Type-C connector
User Controls					
Control Buttons	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter
Audio					
Audio	1 x 1W Speaker (Optional)	1 x Speaker (Optional)	1 x Speaker (Optional)	1 x Speaker (Optional)	1 x Speaker (Optional)
Environment					
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
IP Rating	Front IP65	Front IP65	Front IP65	Front IP65	Front IP65
Power					
Power Input	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)
Power Consumption	6W (Typ.)	9W (Typ.)	8W (Typ.)	13W (Typ.)	10W (Typ.)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

USB Type-C Display

Stand Alone



Model Name	12.1"	15"	15"	15.6" (16:9)	18.5" (16:9)
	R12L100-GCM2-C	R15L100-PTC3-C	R15L600-GCC3-C	W15L100-PTA3-C	W18L100-PTA1-C
Display					
Resolution	1024 x 768	1024 x 768	1024 x 768	1920 x 1080	1366 x 768
Brightness	500 nits	250 nits	250 nits	300 nits	250 nits
Contrast Ratio	700:1 (Typ.)	700:1 (Typ.)	2000:1 (Typ.)	700:1 (Typ.)	1000:1 (Typ.)
Active Area	245.76 (H) x 184.32 (V)	304.128 (H) x 228.096 (V)	304.1 (H) x 228.1 (V)	344.16 (H) x 193.59 (V)	409.8 (H) x 230.4 (V)
Viewing Angle	-80~80 (H) ; -70~70 (V)	-80~80 (H) ; -80~80 (V)	-88~88 (H) ; -88~88 (V)	-85~85 (H) ; -85~85 (V)	-85~85 (H) ; -80~80 (V)
Display Color	16.2M	16.2M	16.2M	16.2M	16.7M
Touch	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)	Projected capacitive (Default), Protection glass, no touch (Optional)
Connectors					
Video Input	1 x USB Type-C	1 x USB Type-C	1 x USB Type-C	1 x USB Type-C	1 x USB Type-C
Power Jack	-	-	-	-	1 x Power Jack
User Controls					
Buttons	5 Keys OSD Control	7 Keys OSD Control	5 Keys OSD Control	7 Keys OSD Control	5 Keys OSD Control
Audio					
Audio	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)
Environment					
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
IP Rating	Front IP65	Front IP65	Front IP65	Front IP65	Front IP65
Power					
Power Source	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)	USB Type-C Alt mode (+5V/3A)
Power Consumption	12W (Typ.)	12W (Typ.)	12W (Typ.)	13W (Typ.)	30W (Typ.)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Display

Product

Industrial

Featured

10.1~15.6" Featured Display

PoE

Custom configuration



P-Cap Touch



Audio and
Speaker



“

**FAST INSTALLATION
WITHOUT ADDITIONAL
ELECTRICAL WIRING.**

”

- 10.1~15.6-inch screen
- Power over Ethernet (PoE)
- Chassis housing



Lobby Digital Signage

“CONVINIENT ETHERNET
INSTALLATION.”

The PoE Touch Monitor was installed as a digital signage in an office lobby. The PoE function allowed it to be installed high up on a wall without needing additional wiring costs.

Power over Ethernet (PoE) IEEE 802.3at (25W)

VGA, HDMI video input

Projected capacitive multitouch

OSD control 5 keys

0°C to 50°C operating temperature

Accessories

User Manual

VGA Cable

HDMI Cable

PoE Display

Panel Mount



Model Name	10.1" (17:10)	10.1" (16:10)	10.4"	12.1"	15"	15.6" (16:9)
	W10L100-PCH1-PoE	W10L100-PCH2-PoE	R10L100-PCT2-PoE	R12L100-PCM2-PoE	R15L100-PTC3-PoE	W15L100-PTA3-PoE
Display						
Resolution	1024 x 600	1280 x 800	1024 x 768	1024 x 768	1024 x 768	1920 x 1080
Brightness	420 nits	350 nits	350 nits	500 nits	300 nits	300 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Viewing Angle	-80~80 (H); -80~75 (V)	-85~85 (H); -85~85 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-80~80 (H); -80~80 (V)	-85~85 (H); -85~85 (V)
Display Color	16.7M	16.7M	16.2M	16.2M	16.2 M	16.2 M
Touch	Projected capacitive, Protective glass (Optional)	Projected capacitive, Protective glass (Optional)	Projected capacitive, Protective glass (Optional)	Projected capacitive, Protective glass (Optional)	Projected capacitive, Protective glass (Optional)	Projected capacitive, Protective glass (Optional)
Touch Interface	USB	USB	USB	USB	USB	USB
Power						
Power Device (PD)	follows IEEE 802.3at (25W)	follows IEEE 802.3at (25W)	follows IEEE 802.3at (25W)	follows IEEE 802.3at (25W)	follows IEEE 802.3at (25W)	follows IEEE 802.3at (25W)
Power Consumption	10W typical, normal operation	10W typical, normal operation	10W typical, normal operation	12W typical, normal operation	15W typical, normal operation	10W typical, normal operation
Power Input	PoE, Power Device (PD) follows IEEE 802.3at (25 W), IEEE 802.3af (15 W)	PoE, Power Device (PD) follows IEEE 802.3at (25 W), IEEE 802.3af (15 W)	PoE, Power Device (PD) follows IEEE 802.3at (25 W), IEEE 802.3af (15 W)	PoE, Power Device (PD) follows IEEE 802.3at (25 W), IEEE 802.3af (15 W)	PoE, Power Device (PD) follows IEEE 802.3at (25 W), IEEE 802.3af (15 W)	PoE, Power Device (PD) follows IEEE 802.3at (25 W), IEEE 802.3af (15 W)
Audio						
Speaker	1 x Speaker (Optional)	1 x Speaker (Optional)	1 x Speaker (Optional)	2 x 1 Watt speakers (Optional)	2 x 1 Watt speaker (Optional)	2 x 1 Watt speaker (Optional)
Connectors						
Video Input	Standard: 1 x VGA (D-sub 15), 1 x HDMI (Type-A)	Standard: 1 x VGA (D-sub 15), 1 x HDMI (Type-A)	Standard: 1 x VGA (D-sub 15), 1 x HDMI (Type-A)	Standard: 1 x VGA (D-sub 15), 1 x HDMI (Type-A)	Standard: 1 x VGA (D-sub 15), 1 x HDMI (Type-A)	Standard: 1 x VGA (D-sub 15), 1 x HDMI (Type-A)
User Controls						
OSD User Controls	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter	5 Keys: -, +, Power, Esc, Enter
Environment						
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
IP Rating	Front IP65	Front IP65	Front IP65	Front IP65	Front IP65	Front IP65
Certifications						
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Display

Product

Industrial

Featured

27/32" Featured Display

4K UHD

Custom configuration



P-Cap Touch



Rubber
Bumper



Calibration
Software



High
Brightness



VSEL
Bonding



Application



Hospital Surgery Room

"ACCURATE IMAGE
REPRODUCTON."

The 4K UHD Display with color calibration is suited for operating room usage where image reproduction needs to be accurate.

“**SUPERIOR RESOLUTION.
PRECISE IMAGING.**”

”

- 27/32-inch screen, 4K2K
- Power over Ethernet (PoE)
- Chassis housing
- HDMI 2.0/DP/HDMI 1.4, SDI input



3840 x 2160 (UHD 4K) resolution

VGA, HDMI , DP, DVI, SDI input

Projected capacitive multitouch

OSD control 5 keys

0°C to 50°C operating temperature

Accessories

User Manual

VGA Cable

HDMI Cable

DP Cable

DVI Cable

4K UHD Display

Chassis



Model Name	27"	32"
	M270TF	M320TF
Display		
Native Resolution	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)
Aspect Ratio	16:9	16:9
Contrast Ratio	1000:1 (typ)	1000:1 (typ)
View Angle	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Active Area	596.16 (H) x 335.34 (V)	708.48 (H) x 398.52 (V)
Response Time	12ms (Gray to Gray)	12ms (Gray to Gray)
Screen Technology	LED Backlight Technology, TFT Active matrix, Widescreen, IPS Technology	LED Backlight Technology, TFT Active matrix, Widescreen, IPS Technology
Light Intensity	300 nits, optional high brightness up to 700 nits	350 nits, optional high brightness up to 700 nits
Max Colors	1.07B	1.07B
Synchronization Signal Auto-detect	Digital Separate Sync., Composite Sync., Sync. On Green	Digital Separate Sync., Composite Sync., Sync. On Green
Color Profiles	3D LUT profile selection + 6 general user color schemes	3D LUT profile selection + 6 general user color schemes
Optimal Resolution and Hz	3840 x 2160 @ 60 Hz 4:4:4	3840 x 2160 @ 60 Hz 4:4:4
Detectable Resolutions (Partial List)	640 x 480, 720 x 400, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1080, 1920 x 1200, 2560 x 1440, 3840 x 2160, 4096 x 2160	640 x 480, 720 x 400, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1080, 1920 x 1200, 2560 x 1440, 3840 x 2160, 4096 x 2160
User Controls		
Sensors	Backlight sensor, Ambient light sensor, IR Control	Backlight sensor, Ambient light sensor, IR Control
Control	Capacitive OSD: Power On/Off, On Screen Display Menu, Brightness Control (-/+)	Capacitive OSD: Power On/Off, On Screen Display Menu, Brightness Control (-/+)
Input Signal	• 3G SDI • Dual DVI In • HDMI 2.0 • HDMI 1.4 • DP1.2 • Audio In • VGA	• 3G SDI • Dual DVI In • HDMI 2.0 • HDMI 1.4 • DP1.2 • Audio In • VGA
Output Signal	• DP (Multi-Stream Transport) • Audio Out • 5V out • 3G SDI (Loop Through), support 1080P	• DP (Multi-Stream Transport) • Audio Out • 5V out • SDI (Loop Through), support to 1080P
Mechanical		
Product Dimensions	643.17 x 408.06 x 48 mm (25.3 x 16.1 x 1.8 in)	777.58 x 477.62 x 48 mm (30.6 x 18.8 x 1.8 in)
Mounting	VESA mounting 100 x 100mm VESA mounting 200 x 100mm	VESA mounting 100 x 100mm VESA mounting 200 x 100mm VESA mounting 300 x 100mm
Product Weight	9.5 kg (20.9 lbs)	11 Kg (24.2 lbs)
Factory Options	• Rubber Bumper • Projected Capacitive Multitouch screen (USB)	• Rubber Bumper • Projected Capacitive Multitouch screen (USB)
Environment		
Operating Temp.	0°C to 35°C, Humidity up to 95%	0°C to 35°C, Humidity up to 95%
Storage Temp.	-20°C to 60°C, Humidity up to 95%	-20°C to 60°C, Humidity up to 95%
IP Rating	Protection: front IP65 - rear IP22	Protection: front IP65 - rear IP22
Power		
Power Input	+24V DC in 150W	+24V DC in 150W
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications		
Type Approval, Testing and Certificates	• IEC 60601-1:2005 + A1:2015 (Ed. 3.1) • IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1) • IEC 62366:2007 + A1:2014 (Ed. 1.1) • ANSI/AAMI ES60601-1:2005/A1:2012 and C1:2009/(R)2012 and A2:2010/(R)2012 • CAN/CSA-C22.2 No.60601-1:14 • EN606001-1-2 • EN55032/EN55024, FCC part 15B • EN60950-1	• IEC 60601-1:2005 + A1:2015 (Ed. 3.1) • IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1) • IEC 62366:2007 + A1:2014 (Ed. 1.1) • ANSI/AAMI ES60601-1:2005/A1:2012 and C1:2009/(R)2012 and A2:2010/(R)2012 • CAN/CSA-C22.2 No.60601-1:14 • EN606001-1-2 • EN55032/EN55024, FCC part 15B • EN60950-1

10.1~32" Featured Display SDI Solution

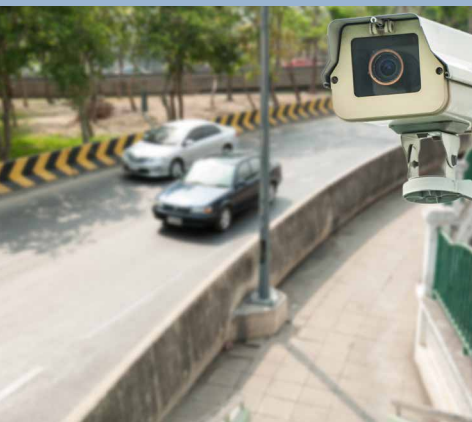
Custom configuration



P-Cap Touch



Application



Surveillance Control Room

"CONNECT TO MULTIPLE PRO CAMERAS."

SDI input and output provide rugged locking connection and long distance data transmission for our Surveillance application.

“ LONG DISTANCE DATA TRANSMISSION. ”

- 10.1~32-inch screen
- 3G SDI input and output
- Chassis housing



3G-SDI input, 3G SDI output

Two CVBC (BNC)

VGA, HDMI video input

Projected capacitive multitouch

OSD control 5 keys

VESA mount

0°C to 50°C operating temperature

Accessories

User Manual

VGA Cable

HDMI Cable

SDI Display

Chassis



Model Name	10.1" (16:10) W10L100-SDH2	15" R15L100-SDA3	19" R19L300-SDA1	21.5 (16:9) W22L100-SDA3	32" (16:9) W32L100-SDA3
Technical Description					
Resolution	1280 x 800	1024 x 768	1280 x 1024	1920 x 1080	1920 x 1080
Brightness	300 nits	550 nits	400 nits	250 nits	250 nits
Contrast Ratio	800:1(Typ.)	700:1(Typ.)	1000:1 (Typ.)	3000:1 (Typ.)	3000:1 (Typ.)
Viewing Angle	-80~80 (H);-70~70 (V)	-80~80 (H);-70~70 (V)	-85~85 (H);-80~80 (V)	-89~89 (H);-89~89 (V)	-89~89 (H);-89~89 (V)
Pixel Pitch	0.1695 (H) x 0.1695 (V)	0.297 (H)x0.297 (V)	0.294 (H) x 0.294 (V)	0.24825 (H) x 0.24825 (V)	0.3638 (H) x 0.3638 (V)
Active Display Area	216.69 (H) x 135.6 (V)	304.1 (H) x 228.1 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)	698.40 (H) x 392.85 (V)
Number of Colors	16.7M (8bits/color)	16.7M (8bits/color)	16.7M	16.7M (8bits/color)	16.7M (8bits/color)
Touch	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive	Projected capacitive
Synchronization Range Horizontal/Vertical	31.5~80.0KHz/60~75Hz	31.5~80.0KHz/60~75Hz	31.5~80.0KHz/60~75Hz	31.5~80.0KHz/60~75Hz	31.5~80.0KHz/60~75Hz
Recommended Resolution	1280 x 800 @60Hz	1024 x 788 @60Hz	1280x1024@60Hz, 75Hz	1920 x 1080@60Hz	1920 x 1080@60Hz
Power Information					
Power Source	+12V DC in, with External AC to DC Adapter (+100~240V AC)	+12V DC in, with External AC to DC Adapter (+100~240V AC)	+12V DC in, with External AC to DC Adapter (+100~240V AC)	+12V DC in, with External AC to DC Adapter (+100~240V AC)	+24V DC in, with External AC to DC Adapter (+100~240V AC)
Power Consumption	15W	20W	27W	30W	45W
Connectors					
External	1 x HDMI 1.3 1 x VGA 2 x CVBS (BNC) 1 x 3G-SDI in 1 x 3G-SDI out (Loop out)	1 x HDMI 1.3 1 x VGA 2 x CVBS (BNC) 1 x 3G-SDI in 1 x 3G-SDI out (Loop out)	1 x HDMI 1.3 1 x VGA 2 x CVBS (BNC) 1 x 3G-SDI in 1 x 3G-SDI out (Loop out)	1 x HDMI 1.3 1 x VGA 2 x CVBS (BNC) 1 x 3G-SDI in 1 x 3G-SDI out (Loop out)	1 x HDMI 1.3 1 x VGA 2 x CVBS (BNC) 1 x 3G-SDI in 1 x 3G-SDI out (Loop out)

5.7~32" Featured Display

High Brightness

Custom configuration



Housing



Resistive
Touch



SAW
Touch



DVI-D



S-Video



Composite



Audio and
Speaker



“ **VISIBILITY AND
BEATING THE SUN.** ”

Application



Self Service Post Terminal

“CRISP AND CLEAR
SCREEN.”

High brightness screen emits more light compare to commercial-grade screens, which means more luminance and contrast. Ideal for use in outdoor environment.

- 5.7~32-inch screen
- Chassis, open frame, panel mount, front IP65
- Sunlight readable screen



VGA, HDMI video input

Touch interface USB/RS-232

Chassis, open frame, panel mount, front IP65

OSD control 5 keys

Supports VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Drive CD

VGA Cable 1.8m

HDMI Cable 2m

High Brightness Display



Open Frame

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
5.7"	R05T100-OFD1HB	115.2(H) x 86.4(V)	640x480	300:1 (Typ.)	900 nits	-70~70(H); -40~60(V)	No	+12V DC	15 W (Typ.)	*		*	
7" (17:10)	W07T700-OF01HB	153.6(H) x 90.0(V)	1024x600	700:1 (Typ.)	1000 nits	-75~75(H); -75~70(V)	No	+12V DC	8 W (Typ.)	*			
8.4"	R08T200-OFT1HB	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	1000 nits	-80~80(H); -60~80(V)	Yes	+12V DC	15 W (Typ.)	*		*	
10.1" (17:10)	W10L100-OFH1HB	222.72(H) x 125.28(V)	1024x600	800:1 (Typ.)	800 nits	-80~80(H); -80~75(V)	Yes	+12V DC	7 W (Typ.)	*			
10.4"	R10L600-OF1HB	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	1000 nits	-70~70(H); -70~60(V)	Yes	+12V DC	15 W (Typ.)	*		*	*
10.4"	R10L100-OFT2HB	210.4(H) x 157.8(V)	1024x768	1200:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	+12V DC	15 W (Typ.)	*			
12.1"	R12T600-OFL1HB	246.0(H) x 184.5(V)	800x600	700:1 (Typ.)	1000 nits	-80~80(H); -75~65(V)	Yes	+12V DC	15 W (Typ.)	*	*	*	*
12.1" (16:10)	W12L100-OFM9HB	261.12(H) x 163.2(V)	1280x800	1000:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	+12V DC	20 W (Typ.)	*			
12.1"	R12L600-OFM2HB	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	1000 nits	-80~80(H); -70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
15"	R15L100-OFC3HB	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	+12V DC	22 W (Typ.)	*	*	*	*
15.6" (16:9)	W15L100-OFA2HB	344.232(H) x 193.536(V)	1366x768	500:1 (Typ.)	1300 nits	-85~85(H); -80~80(V)	Yes	+12V DC	25 W (Typ.)	*			
17"	S17L500-OFA1HB	337.920(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	+12V DC	32 W (Typ.)	*	*	*	
18.5" (16:9)	W18L100-OFA2HB	409.8(H) x 230.4(V)	1366x768	1000:1 (Typ.)	800 nits	-85~85(H); -80~80(V)	Yes	+12V DC	32 W (Typ.)	*			
19"	R19L300-OFA1HB	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	+12V DC	31 W (Typ.)	*	*	*	
21.5" (16:9)	W22L100-OFA3HB	476.64(H) x 268.11(V)	1920x1080	5000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	50 W (Typ.)	*			
22" (16:10)	W22L100-OFM1HB	473.76(H) x 296.1(V)	1680x1050	1000:1 (Typ.)	1000 nits	-80~80(H); -80~80(V)	Yes	+12V DC	60 W (Typ.)	*		*	
24" (16:9)	W24L100-OFA2HB	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	65W (Typ.)				
27" (16:9)	W27L100-OFA1HB	597.6 (H) x 336.15 (V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	70W (Typ.)				
32" (16:9)	W32L100-OFA3HB	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	75W (Typ.)				



Chassis

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW
15"	R15L100-CHC3HB	304.128(H) x 228.096(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	+12V DC	30 W typical, normal operation	*	*	*
17"	R17L500-CHA1HB	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	+12V DC	45 W typical, normal operation	*	*	*
19"	R19L300-CHA1HB	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	+12V DC	31 W typical, normal operation	*	*	*
21.5" (16:9)	W22L100-CHA3HB	476.64 (H) x 268.11 (V)	1920x1080	5000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	50 W typical, normal operation	*		
42" (16:9)	W42L100-OML2HB	930.24 (H) x 523.26 (V)	1920x1080	4000:1 (Typ.)	700 nits	-89~89(H); -89~89(V)		+100~240V AC-in	110 W typical, normal operation			

High Brightness Display



Panel Mount

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
5.7"	R05T100-PMD1HB	115.2(W) x 86.4(H)	640x480	300:1 (Typ.)	900 nits	-70~70(H); -40~60(V)	No	12V DC	15 W (Typ.)	*			
8.4"	R08T200-PMT1HB	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	1000 nits	-80~80(H); -60~80(V)	Yes	12V DC	15 W (Typ.)	*		*	
10.1" (17:10)	W10L100-PMH1HB	222.72(H) x 125.28(V)	1024x600	800:1 (Typ.)	800 nits	-70~70(H); -60~50(V)	Yes	12V DC	7 W (Typ.)	*			
10.4"	R10L600-PMP1HB	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	1000 nits	-70~70(H); -70~60(V)	Yes	12V DC	15 W (Typ.)	*		*	*
10.4"	R10L100-PMT2HB	210.4(H) x 157.8(V)	1024x768	1200:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	12V DC	15 W (Typ.)	*		*	*
12.1"	R12T600-PML1HB	246.0(H) x 184.5(V)	800x600	700:1 (Typ.)	1000 nits	-80~80(H); -75~65(V)	Yes	12V DC	15 W (Typ.)	*			
12.1"	R12L600-PMM2HB	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	1000 nits	-80~80(H); -70~70(V)	Yes	12V DC	20 W (Typ.)	*	*	*	*
15"	R15L100-PMC3HB	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	12V DC	30 W (Typ.)	*	*		
15.6" (16:9)	W15L100-PMA2HB	344.232(H) x 193.536(V)	1366x768	500:1 (Typ.)	1300 nits	-85~85(H); -80~80(V)	Yes	12V DC	25 W (Typ.)	*			
17"	S17L500-PMA1HB	337.920(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	12V DC	25 W (Typ.)	*	*	*	*
19"	R19L300-PMA1HB	376.32 (H) x 301.06 (V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	12V DC	31 W (Typ.)	*	*	*	
21.5" (16:9)	W22L100-PMA3HB	476.64(H) x 268.11 (V)	1920x1080	5000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	50 W (Typ.)	*			
24" (16:9)	W24L100-PMA2HB	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	65W (Typ.)				
27" (16:9)	W27L100-PMA1HB	597.6 (H) x 336.15 (V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	70W (Typ.)				
32" (16:9)	W32L100-PMA3HB	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	75W (Typ.)				



Front IP65

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
7" (17:10)	W07T700-IPO1HB	153.6(H) x 90.0(V)	1024x600	700:1 (Typ.)	1000 nits	-75~75(H); -75~70(V)	No	12V DC	8 W (Typ.)	*			
8.4"	R08T200-IPT1HB	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	1000 nits	-80~80(H); -60~80(V)	Yes	12V DC	10 W (Typ.)	*			
10.4"	R10L600-IPP1HB	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	1000 nits	-70~70(H); -70~60(V)	Yes	12V DC	15 W (Typ.)	*			*
10.4"	R10L100-IPT2HB	210.4(H) x 157.8(V)	1024x768	1200:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	12V DC	15 W (Typ.)	*			*
12.1"	R12L600-IPM2HB	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	1000 nits	-80~80(H); -70~70(V)	Yes	12V DC	17 W (Typ.)	*	*		
15"	R15L100-IPA3HB	304.128(H) x 228.096(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88(H); -88~88(V)	Yes	12V DC	22 W (Typ.)	*	*		
19"	R19L300-IPA1HB	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	12V DC	31W (Typ.)	*	*	*	
17"	S17L500-IPA1HB	337.92 (H) x 270.336 (V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	12V DC	32 W (Typ.)	*	*		
21.5"	W22L100-IPA3HB	476.64 (H) x 268.11 (V)	1920x1080	5000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	50 W (Typ.)	*			
24" (16:9)	W24L100-IPA2HB	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	65W (Typ.)				
27" (16:9)	W27L100-IPA1HB	597.6 (H) x 336.15 (V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	70W (Typ.)				
32" (16:9)	W32L100-IPA3HB	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	12V DC	75W (Typ.)				

High Brightness Display



P-Cap Panel Mount

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Capacitive
10.4"	R10L100-PPP1HB	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	1000 nits	-70~70 (H); -70~60 (V)	Yes	+12V DC	15 W (Typ.)	Projected Capacitive Multi-Touch
10.4"	R10L100-PPT2HB	210.4(H) x 157.8(V)	1024x768	1200:1 (Typ.)	1000 nits	-88~88 (H); -88~88 (V)	Yes	+12V DC	15 W (Typ.)	Projected Capacitive Multi-Touch
15"	R15L600-PPC3HB	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88 (H); -88~88 (V)	Yes	+12V DC	25 W (Typ.)	Projected Capacitive Multi-Touch
15.6" (16:9)	W15L100-PPA2HB	344.232(H) x 193.536(V)	1366x768	500:1 (Typ.)	1300 nits	-85~85(H); -80~80(V)	Yes	+12V DC	25 W (Typ.)	Projected Capacitive Multi-Touch
19"	R19L300-PPA1HB	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85(H); -80~80(V)	Yes	+12V DC	27 W (Typ.)	Projected Capacitive Multi-Touch
21.5" (16:9)	W22L100-PPA3HB	476.64(H) x 268.11(V)	1920x1080	5000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes	+12V DC	30 W (Typ.)	Projected Capacitive Multi-Touch
24" (16:9)	W24L100-PPA2HB	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	65W (Typ.)	Projected Capacitive Multi-Touch
27" (16:9)	W27L100-PPA1HB	597.6 (H) x 336.15 (V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	70W (Typ.)	Projected Capacitive Multi-Touch
32" (16:9)	W32L100-PPA3HB	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	75W (Typ.)	Projected Capacitive Multi-Touch

Industrial Display

Product

Industrial

Featured

7~32" Featured Display Transflective

Custom configuration



Housing



Resistive
Touch



SAW
Touch



DVI-D



S-Video



Composite

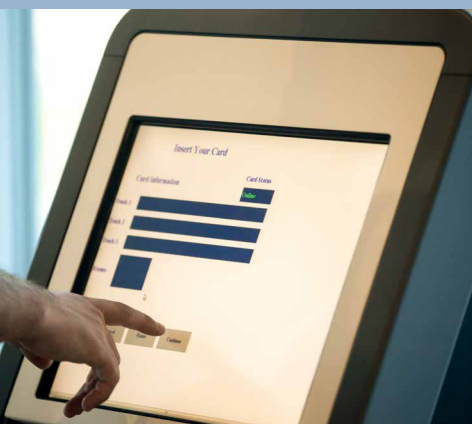


Audio and
Speaker



“ **LOW POWER CONSUMPTION.
SUNLIGHT READABLE SCREEN.** ”

- 7~32-inch screen
- Chassis, open frame, front IP65, Panel mount
- Lower power consumption



Parking Paying Terminal

“BRIGHTER BACKLIGHT
WITHOUT DRAWING
MORE POWER.”

The transflective display remains readable in bright light without requiring a specialized backlight. This reduces thermal issues and power consumption.

VGA, HDMI video input

Touch interface USB/RS-232

Chassis, open frame, front IP65

OSD control 5 keys

Supports VESA mount

0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Transflective Display

Open Frame



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
7" (16:10)	W07T700-OFA4TR	152.40(H) x 91.44(V)	800x480	1000:1 (Typ.)	500 nits	-80~80 (H); -80~80 (V)	No	+12V DC	10 W (Typ.)	*			
8.4"	R08L200-OFU1TR	70.4(H) x 127.8(V)	800x600	600:1 (Typ.)	500 nits	-75~75(H); -60~70(V)	Yes	+12V DC	10W (Typ.)	*		*	
10.4"	R10L600-OPF1TR	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	700 nits	-70~70 (H); -70~60 (V)	Yes	+12V DC	13 W (Typ.)	*			
12.1"	R12L600-OFM2TR	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	600 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
15"	R15L100-OFA1TR	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	600 nits	-88~88 (H); -88~88 (V)	Yes	+12V DC	31 W (Typ.)	*	*	*	*
17"	S17L500-OFA1TR	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	400 nits	-85~85(H); -80~80(V)	Yes	+12V DC	32 W (Typ.)	*	*	*	
24" (16:9)	W24L100-OFA2TR	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	65W (Typ.)				
32" (16:9)	W32L300-OFA3TR	698.40(H) x 392.85(V)	1920x1080	3000:1 (Typ.)	430 nits	-89~89(H); -89~89(V)	Yes	+24V DC	75 W (Typ.)			*	

Industrial Display

Product

Industrial

Featured

Chassis



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
7" (16:10)	W07T700-CHA4TR	152.40(H) x 91.44(V)	800x480	1000:1(Typ.)	500 nits	-80~80(H); -80~80(V)	No	+12V DC	9 W (Typ.)	*			
10.4"	R10L600-CHP1TR	211.2(H) x 158.4(V)	800x600	400:1(Typ.)	700 nits	-70~70(H); -70~60(V)	Yes	+12V DC	13 W (Typ.)	*			
10.4"	R10L100-CHP3TR	211.2 (H) x 158.4 (V)	640x480	700:1(Typ.)	540 nits	-80~80(H); -80~60(V)	Yes	+12V DC	15 W (Typ.)	*			
12.1"	R12L600-CHM2TR	245.76(H) x 184.32(V)	1024x768	700:1(Typ.)	600 nits	-80~80(H); -70~70(V)	Yes	+12V DC	20 W (Typ.)	*	*	*	*
15"	R15L100-CHA1TR	304.128(H) x 228.096(V)	1024x768	2000:1(Typ.)	600 nits	-88~88(H); -88~88(V)	Yes	+12V DC	31 W (Typ.)	*	*	*	*
17"	R17L500-CHA1TR	337.92(H) x 270.34(V)	1280x1024	1000:1(Typ.)	400 nits	-85~85(H); -80~80(V)	Yes	+12V DC	32 W (Typ.)	*	*	*	
24" (16:9)	W24L100-CHA2TR	527.04(H) x 296.46(V)	1920x1080	3000:1(Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	65W (Typ.)				
32" (16:9)	W32L100-CHA3TR	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	75 W (Typ.)				



Front IP65

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
15"	R15L100-IPA1TR	304.128(H) x 228.096(V)	1024x768	2000:1(Typ.)	600 nits	-88~88(H); -88~88(V)	Yes	+12V DC	31 W (Typ.)	*	*	*	*
17"	S17L500-IPA1TR	337.92(H) x 270.34(V)	1280x1024	1000:1(Typ.)	400 nits	-85~85(H); -80~80(V)	Yes	+12V DC	25 W (Typ.)	*	*	*	
24" (16:9)	W24L100-IPA2TR	527.04(H) x 296.46(V)	1920x1080	3000:1(Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	65W (Typ.)				
32" (16:9)	W32L100-IPA3-TR	698.4 (H) x 392.85(V)	1920x1080	3000:1(Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	+12V DC	75 W (Typ.)				

6.5~19" Featured Display

Wide Temperature

Custom configuration



Housing



Resistive
Touch



SAW
Touch



DVI-D



S-Video



Composite



Audio and
Speaker



“

FOR EXTREME WEATHER.

”

Applications



ATM Machine

“RELIABLE SYSTEM
WITH EXTENDED
TEMPERATURE RANGE.”

With front IP65 water and
dust protection our display
was installed in an ATM
machine located outdoors.

- 6.5~19-inch screen
- Rear mount, front IP65, Panel mount
- Wide Operating Temperature



VGA, HDMI video input

Touch interface USB/RS-232

Rear mount, front IP65

OSD control 5 key

-20°C to 60°C operating temperature

Accessories

Power Cord

Adapter

Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Wide Temperature Display



Front IP65

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
8.4"	R08T200-IPT1WT	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	450 nits	-80~80(H); -60~80(V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	15 W typical, normal operation	*		*	
10.4"	R10L100-IPA1WT	211.2(H) x 158.4(V)	1024x768	700:1 (Typ.)	550 nits	-80~80(H); -70~70(V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	18 W typical, normal operation	*			
12.1"	R12L600-IPM2WT	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	500 nits	-80~80(H); -70~70(V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	20 W typical, normal operation	*	*	*	*
15"	R15L100-IPA3WT	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	400 nits	-88~88(H); -88~88(V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	23 W typical, normal operation	*	*	*	
17"	S17L500-IPA1WT	337.92(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	35 W typical, normal operation	*	*	*	*
19"	R19L300-IPA2WT	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	40 W typical, normal operation	*	*	*	*

Industrial Display

Product

Industrial

Featured



Rear Mount

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
6.5"	R06L200-RMA1WT	132.48(H) x 99.36(V)	640x480	450:1 (Typ.)	400 nits	-80~80 (H); -70~70 (V)	No	+12V DC in, with External AC-DC Adapter (+100~240V)	15 W typical, normal operation				
8.4"	R08T200-RMT1WT	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	450 nits	-80~80 (H); -60~80 (V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	15 W typical, normal operation	*			
10.4"	R10L100-RMA1WT	211.2(H) x 158.4(V)	1024x768	700:1 (Typ.)	550 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	18 W typical, normal operation	*			
12.1"	R12L600-RMM2WT	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	500 nits	-80~80 (H); -70~70 (V)	No	+12V DC in, with External AC-DC Adapter (+100~240V)	20 W typical, normal operation	*	*	*	*
15"	R15L100-CHA3WT	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	400 nits	-88~88 (H); -88~88 (V)	Yes	12V DC in, with +External AC-DC Adapter (+100~240V)	23 W typical, normal operation	*	*	*	*
17"	R17L500-CHA1WT	337.92(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85 (H); -80~80 (V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	35 W typical, normal operation	*	*	*	*

10.4~21.5" Featured Display

IP69K Stainless

Custom configuration



P-Cap Touch



DVI-D



“

**WITHSTANDS HIGH
PRESSURE WASH DOWNS,
EASY-TO-CLEAN.**

”

- 10.4~21.5-inch screen
- Stainless housing CNS 304
- Full IP69K with air venting valve



Food Production Plant

“EASY TO CLEAN
FOR HYGIENIC
REQUIREMENTS.”

Sealed to IP69K Winmate's Stainless Steel Display was used in a food processing facility where it had to withstand high pressure washdowns everyday.

Stainless steel housing SUS304

Waterproof connectors DVI, VGA, Power, USB for touch

OSD control 5 keys

VESA mount

IP69K with air venting valve

-10°C to 55°C Operating Temperature

Accessories

Quick Start Guide

VESA Screws

Power Cord

Adapter

VGA Cable

USB Cable for Touch

IP69K Stainless Display

Projected Capacitive Multitouch



Model Name	10.4"	15"	19"	21.5" (16:9)
	R10L100-SPT269	R15L100-SPC369	R19L100-SPM169	W22L100-SPA369
Display				
Resolution	1024 x 768	1024 x 768	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	250 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	210.4 (H) x 157.8 (V)	304.128 (H) x 228.096 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-88~88 (H); -60~80 (V)	-80~80 (H); -70~70 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.2M	16.7M	16.7M
Touch	Projected Capacitive (Default), Protection Glass (Optional)	Projected Capacitive (Default), Protection Glass (Optional)	Projected Capacitive (Default), Protection Glass (Optional)	Projected Capacitive (Default), Protection Glass (Optional)
Connectors				
Video Input	1 x 3-Pin power 1 x 10-Pin VGA 1 x DVI-D (Optional) 1 x USB connector	1 x 3-Pin power 1 x 10-Pin VGA 1 x DVI-D (Optional) 1 x USB connector	1 x 3-Pin power 1 x 10-Pin VGA 1 x DVI-D (Optional) 1 x USB connector	1 x 3-Pin power 1 x 10-Pin VGA 1 x DVI-D (Optional) 1 x USB connector
Mechanical				
Dimensions	289.5 x 246 x 49.4 mm	378 x 301 x 56.4 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Environment				
IP Proof	IP69K, air venting valve	IP69K, air venting valve	IP69K, air venting valve	IP69K, air venting valve
Mouting	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power				
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	26W	30W	26W	50W
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Display

Product

Industrial

Featured

10.4-19" Featured Display IP67 Stainless

Custom configuration



Housing



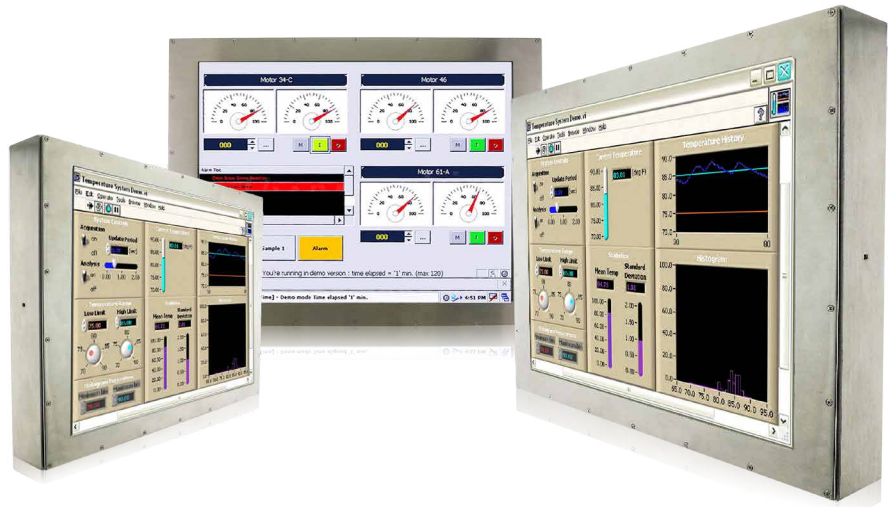
RS-232
For Touch



USB
For Touch



Resistive
Touch



**“ RUGGED. WATERPROOF.
DUSTPROOF. ”**

Application



Pharmaceutical Manufacturing Control Systems

“INCREASE
PRODUCTIVITY AND
PROFITABILITY.”

Real-time access and
extended enterprise visibility
to vital manufacturing data.

- 10.4~19-inch screen
- Stainless housing CNS 304
- VESA mount



VGA video input

Touch interface USB/RS-232

OSD control 5 keys

0°C to 50°C operating temperature

Accessories

Power Cord

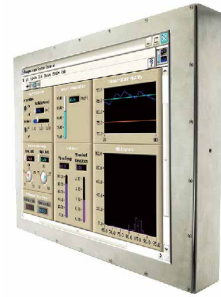
AC Adapter

Drive CD

VGA Cable 1.8m

IP67 Stainless Display

Resistive Touch



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive
10.4"	R10L100-67T2ST	210.432(H) x 157.824(V)	1024x768	1200:1 (Typ.)	350 nits	-88~88(H); -88~88(V)		+12V DC	15W (Typ.)	*	
15"	R15L600-67C3ST	304.128(H) x 228.096(V)	1024x768	2000:1 (Typ.)	250 nits	-88~88(H); -88~88(V)		+12V DC	25W (Typ.)	*	*
19"	R19L300-67M1ST	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)		+12V DC	27W (Typ.)	*	*

Industrial Display

Product

Industrial

Featured

10.4~21.5" Featured Display IP65 Stainless

Custom configuration



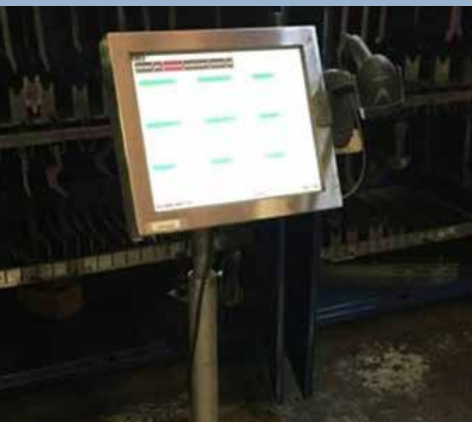
P-Cap Touch



DVI-D



Application



Automotive Part Manufacturing Plant

"RESISTS ANY
SUBSTANCE WITH
ROBUST STAINLESS
DESIGN."

Winmate's IP65 Stainless Steel Displays were used in an automobile parts manufacturing facility where the corrosion resistant housing is able to withstand the chemicals used.

“

**DURABLE IN ALL HARSH
ENVIRONMENTS.**

”

- 10.4~21.5-inch screen
- Stainless housing CNS 304
- Full IP65



Stainless steel housing SUS304

Waterproof connectors VGA, Power, USB for Touch

OSD control 5 keys

VESA mount

Full IP65

-10°C to 55°C operating temperature

Accessories

Quick Start Guide

R-Series AD Board Manual

Power Cord

AC Adapter

VGA Cable

USB Cable for Touch

VESA Screws

IP65 Stainless Display

Projected Capacitive Multitouch



Model Name	10.4"	15"	17"	19"	21.5" (16:9)
	R10L100-SPT2	R15L100-SPC3	R17L100-SPA1	R19L100-SPM1	W22L100-SPA3
Display					
Resolution	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	350 nits	250 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-88~88 (H); -60~80 (V)	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.0685 (H) x 0.2055 (V)	0.297 (H) x 0.297 (V)	0.264 (H) x 0.264 (V)	0.294 (H) x 0.294 (V)	0.248 (H) x 0.248 (V)
Display Color	16.2M	16.2M	16.7M	16.7M	16.7M
Touch	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive	Projected Capacitive
Connectors					
Video Input	1 x DVI-D (Optional) 1 x VGA 1 x USB for Touch 1 x Lockable Power Jack	1 x DVI-D (Optional) 1 x VGA 1 x USB for Touch 1 x Lockable Power Jack	1 x DVI-D (Optional) 1 x VGA 1 x USB for Touch 1 x Lockable Power Jack	1 x DVI-D (Optional) 1 x VGA 1 x USB for Touch 1 x Lockable Power JackC	1 x DVI-D (Optional) 1 x VGA 1 x USB for Touch 1 x Lockable Power Jack
Mechanical					
Dimensions	299.5 x 256 x 49.4 mm	374 x 297 x 56.4 mm	423 x 355 x 61.3 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Mouting	VESA Mount	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Environment					
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Proof	Full IP65	Full IP65	Full IP65	Full IP65	Full IP65
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	26W	30W	31W	26W	50W
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Industrial Display

Product

Industrial

Featured

8.4~42" Featured Display IP65 Stainless

Custom configuration



Housing



Resistive
Touch



P-Cap Touch



Optical
Bonding



Application



Packaging Automation System

"IMPROVE PACKAGING
FLEXIBILITY."

Information display at the
bottling water on the plant
make packaging machines
smarter.

“**WATERPROOF AND
CORROSION RESISTANT.**”

- 8.4~42-inch screen
- Stainless housing CNS 304
- Chassis, moisture prevention
- VESA mount



VGA video input

Touch interface RS-232/USB

OSD control 5 keys

0°C to 50°C operating temperature

Accessories

Power Cord

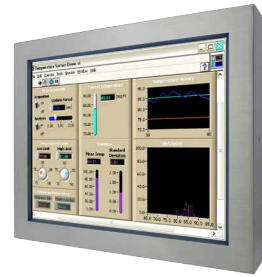
AC Adapter

Drive CD

VGA Cable 1.8m

IP65 Stainless Display

Resistive Touch



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Power Input	Power Consumption	Resistive	Capacitive
8.4"	R08T200-65T1	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	450 nits	-80~80(H); -60~80(V)	+12V DC	25 W (Typ.)	*	
15"	R15L600-65C3	304.1 (H) x 228.1 (V)	1024x768	2000:1 (Typ.)	250 nits	-88~88(H); -88~88(V)	+12V DC	25 W (Typ.)	*	*
17"	R17L500-65A1	337.92 (H) x 270.34 (V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	+12V DC	32 W (Typ.)	*	*
17"	R17L500-65M1	337.92 (H) x 270.34 (V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	+12V DC	32 W (Typ.)	*	*
19"	R19L300-65M1	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	12V DC+	27 W (Typ.)	*	*
19"	R19L300-65M1-1	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	+12V DC	31 W (Typ.)	*	*
21.5" (16:9)	W22L100-65A3	476.64 (H) x 268.11 (V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	+12V DC	50 W (Typ.)	*	
24" (16:9)	W24L100-65A2	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	+12V DC	65W (Typ.)		
32" (16:9)	W32L300-65A3 (by request)	698.4 (H) x 392.85 (V)	1920x1080	3000:1 (Typ.)	350 nits	-89~89(H); -89~89(V)	+12V DC	48 W (Typ.)		
42" (16:9)	W42L100-65A3	930.24(H) x 523.26(V)	1920x1080	4000:1 (Typ.)	500 nits	-89~89(H); -89~89(V)	1+2V DC	81 W (Typ.)		
42" (16:9)	W42L300-65A3 (by request)	930.24(H) x 523.26(V)	1920x1080	4000:1 (Typ.)	500 nits	-89~89(H); -89~89(V)	+24V DC	105 W (Typ.)		

Industrial Display

Product

Industrial

Featured

Full IP65 Moisture Prevention Display

Industrial Display

Product

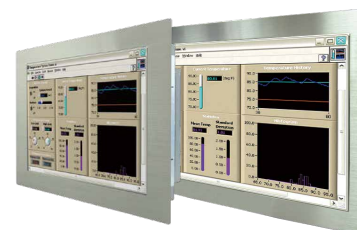
Industrial

Featured



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR≥10)	Optional DVI Input	Power Source	Power Consumption	Resistive	Capacitive
15"	R15L600-65C3-1	304.1(H) x 228.1(V)	1024x768	700:1 (Typ.)	250 nits	-80~80 (H); -70~70 (V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	25 W typical, normal operation	*	
17"	R17L500-65A1-1	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85 (H); -80~80 (V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	32 W typical, normal operation	*	
19"	R19L300-65M1-1	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85 (H); -80~80 (V)	Yes	+12V DC in, with External AC-DC Adapter (+100~240V)	31 W typical, normal operation	*	*

Front IP65 Display



Size	Model Name	Active Display Area(mm)	Number of Pixels	Contrast Ratio	Brightness (cd/m ²)	Viewing Angle (CR≥10)	Optional DVI Input	Resistive	Capacitive	SAW
15"	R15L100-STA3	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	400 nits	-88~88(H); -88~88(V)	Yes	*	*	
17"	S17L500-STM1	337.92(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	Yes	*	*	*
19"	R19L300-STM1	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	250 nits	-85~85(H); -80~80(V)	Yes	*	*	*
21.5" (16:9)	W22L100-STA3	476.64(H) x 268.11(V)	1920x1080	3000:1 (Typ.)	250 nits	-89~89(H); -89~89(V)	Yes	*	*	
24" (16:9)	W24L100-STA2	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	*	*	
27" (16:9)	W27L100-STA1	597.6 (H) x 336.15 (V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	*	*	
32" (16:9)	W32L100-STA3	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89(H); -89~89(V)	Yes	*	*	

Flat Stainless Display



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive
15"	R15L600-65A1FTE	304.128(H) x 228.096(V)	1024x768	2000:1 (Typ.)	400 nits	-88~88 (H); -88~88 (V)	NO	+12V DC	20 W typical, normal operation	*	
15"	R15L600-65EX	304.128(H) x 228.096(V)	1024x768	700:1 (Typ.)	600 nits	-80~80(H); -70~70(V)	NO	+9~36 V DC	20 W typical, normal operation	*	

Industrial Display

Product

Industrial

Featured

15/19" Featured Display

IP67 Aluminum

Custom configuration



Housing



Resistive
Touch



AR Glass



High
Brightness



HDMI



RS-232
For Touch



**“ RUGGED. WATERPROOF.
DUSTPROOF. ”**

Application



Train Operator Navigation

**“VIBRATION RESISTANCE
AND VIBRANT COLORS”**

Vibration resistant Winmate
19-inch aluminum display
helps train operator to
navigate the way even when
temperature goes far below
zero degrees.

- 15/19-inch screen
- Aluminum housing
- VESA mount



VGA video input

Touch interface USB

Front OSD control

Wide range input power +9~36V DC

Extended operating temperature

Accessories

Power Cord

AC Adapter

Drive CD

VGA Cable 1.8m

IP67 Aluminum Display

Resistive Touch



Industrial Display

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Power Input	Resistive	Capacitive
15"	R15L100-67C3HB	304.128(H) x 228.096(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88 (H); -88~88 (V)	+9~36V DC input	*	
19"	R19L100-67FTP	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	400 nits/1000 Optional	-85~85(H); -80~80(V)	+9~36V DC input		*

Product

Industrial

Featured

Specifications	15"	19"
Connectors	• 1 x VGA(waterproof/IP67 grade) • 1 x DVI(waterproof/IP67 grade) for optional • 1 x VIDEO(waterproof/IP67 grade) for optional • 1 x DC-in (waterproof/IP67 grade) • 1 x RS-232/USB for optional Touch Screen (waterproof/IP67 grade)	• 1 x IP67 grade Connectors for HDMI • 1 x IP67 grade Connectors for DC +9~36V in • 1 x IP67 grade Connectors for RS-232 Remote control • 1 x IP67 grade Connectors • USB for Touch Screen • 1 x IP67 grade Connectors for VGA signal in
Shock	Operating:40g for 18ms	MIL-STD-810G Method 516.6
Vibration	Operating: 1.62/2.02/2.20g rms for XYZ/5-500Hz	MIL-STD-810G Method 514.6
Mounting Bracket and Kits	One robust bracket with locking handle (Can adjust from -5° to 90°)	One robust bracket with locking handle (Can adjust from -5° to 90°)
Certifications	CE, FCC ClassB MIL810F for Vibration /Shock	• UL60950-1, CSA C22.2 No. 60950-1-07, EN60950-1,IEC60950-1 • CE • FCC • FIP67 Sealed Housing certified by SGS

7-19" Featured Display

G-WIN Rugged

Custom configuration



DVI-D



S-Video



Composite



HDMI



RS-232
For Touch



USB
For Touch



Resistive
Touch



DC Lockable
Input



**“ WIDE TEMPERATURE FOR
EXTREME WEATHER. ”**

- 7~19-inch screen
- Anti-corrosion housing
- VESA mount



VGA video input

Touch interface USB/RS-232

OSD control

Shock and vibration resistant MIL-STD-810F/G

-10°C to 55°C operating temperature

Military Vehicle Navigation Display

“EASY-TO-READ,
EASY-TO-USE.”

15-inch G-WIN display now
is a part of navigation and
information system for force
vehicles.

Accessories

Power Cord

AC Adapter

Drive CD

VGA Cable 1.8m

Mounting Bracket

G-WIN Rugged Display

Vehicle Mount



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Resistive	IR
8.4"	R08T200-VMU1	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	600 nits	-75~75 (H); -70~60 (V)	5 Wire Resistive	
10.4"	R10L100-VMT2	210.4(H) x 157.8(V)	1024x768	1200:1 (Typ.)	350 nits	-88~88 (H); -88~88 (V)	5 Wire Resistive	*
12.1" (16:10)	W12L100-VMM9	261.12(H) x 163.2(V)	1280x800	1000:1 (Typ.)	400 nits	-88~88 (H); -88~88 (V)	5 Wire Resistive	
15"	R15L100-VMC3HB	304.128(H) x 228.096(V)	1024x768	700:1 (Typ.)	1000 nits	-80~80 (H); -60~80 (V)	5 Wire Resistive	
19"	R19L100-67FTP	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	400 nits	-85~85 (H); -80~80 (V)	Projected Capacitive	

Industrial Display

Product

Industrial

Featured



GS Series

Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR>=10)	Optional DVI Input (CR>=10)	Power Input (M12 Type)	Capacitive
7" (16:9)	W07L100-GSO1	153.6(H) x 90.0(V)	1024x600	700:1 (Typ.)	1000 nits	-75~75 (H); -70~75 (V)	• VGA • USB for touch	+12V DC in (M12 Type Connector)	*
7" (17:10)	W07L100-GST1	153.6 (H) x 90 (V)	1024 x 600	500:1 (Typ.)	320 nits	-75~75 (H); -75~70 (V)	• VGA • USB for touch	+12V DC in (M12 Type Connector)	*
10.1" (17:10)	W10L100-GSH1	222.72(H) x 125.28(V)	1024x600	800:1 (Typ.)	450 nits	-75~80 (H); -80~80 (V)	• VGA • USB for touch	+12V DC in (M12 Type Connector)	*
10.4"	R10L100-GST2	210.4 (H) x 157.8 (V)	1024x768	1200:1 (Typ.)	350 nits	-88~88 (H); -88~88 (V)	• VGA • USB for touch	+9~36V DC in (M12 Type Connector)	*
12.1"	R12L100-GSM2	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	500 nits	-80~80 (H); -70~70 (V)	• VGA • USB for touch	+9~36V DC in (M12 Type Connector)	*
15"	R15L600-GSC3	304.1(H) x 228.1(V)	1024x768	2000:1 (Typ.)	250 nits	-88~88 (H); -88~88 (V)	• VGA • USB for touch	+9~36V DC in (M12 Type Connector)	*

27~38" Featured Display

Bar-Type

Custom configuration



Housing



Audio and
Speaker



Application



Retail Shelf

**"SPACE-SAVING
SOLUTION."**

Designed for the space-restricted areas, 27-inch chassis bar-type display now enhance customer experience while shopping.

**“ UNIQUE LONG STRUCTURE
DESIGN. ”**

- 27~38-inch screen
- Open frame, chassis



VGA, HDMI, DVI video input

Remote control RS-232

Rear mount, front IP65

0°C to 50°C operating temperature

Accessories

Power Cord

Adapter

Drive CD

VGA Cable 1.8m

HDMI Cable 2m

Bar-Type Display

Open Frame, Chassis



		27.6"	28.6"	38"
Model Name	Open Frame	W27L100-OFC1	W28L100-OFA2	W38L100-OFA1
	Chassis	W27L100-CHC1	W28L100-CHA2	W38L100-CHA1
Display				
Resolution		1920 x 360	1920 x 540	1920 x 540
Brightness		1000 nits	1000 nits	1000 nits
Contrast Ratio		1000:1 (Typ.)	1000:1 (Typ.)	4000:1 (Typ.)
Active Area		688.896 (H) x 129.168 (V)	698.4 (H) x 196.4 (V)	904.32 (H) x 254.34 (V)
Viewing Angle		-85~85 (H); -85~85 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Display Color		16.7M	16.7M	1.07B
Touch		No	No	No
Power				
Power Input		+12V DC, with External AC-DC Adapter (+100~240V)	+12V DC, with External AC-DC Adapter (+100~240V)	+24V DC, with External AC-DC Adapter (+100~240V)
Power Consumption		40 W (Typ.)	40 W (Typ.)	75 W (Typ.)
Audio				
Speaker		Audio input, stereo speakers (Optional)	Audio input, stereo speakers (Optional)	Audio input, stereo speakers (Optional)
Connectors				
Video Input		1 x VGA 1 x DVI 1 x HDMI	1 x VGA 1 x DVI 1 x HDMI	1 x VGA 1 x DVI 1 x HDMI
Remote Control		RS-232 port (Optional)	RS-232 port (Optional)	RS-232 port (Optional)
Environment				
Operating Temp.		0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.		-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

17/19" Featured Industrial Display 1U Console Drawer

Custom configuration

NA



**“A SINGLE SET OF KEYBOARD,
MONITOR & MOUSE.”**

- 17/19-inch screen
- Console mount



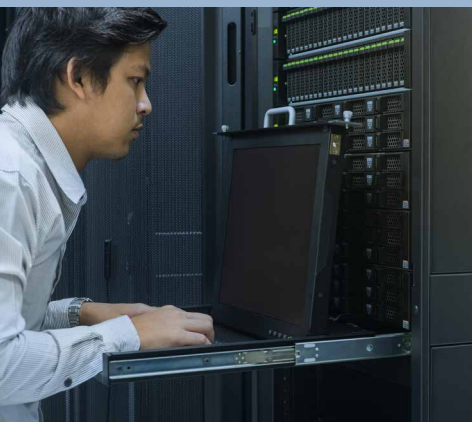
VGA video input

Keyboard, mouse: HDB-15

OSD control 5 keys

Console mount

0°C to 50°C operating temperature



Enterprise Data Center

“SAVE SPACE AND CAN
BE DRAWN
WHEN NEEDED.”

Provides ease of access to
servers, making software
upgrades, troubleshooting and
system monitoring convenient
and less time consuming.

Accessories

Power Cord

AC Adapter

Touch Drive CD

VGA Cable 1.8m

1U Console Drawer



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR≥10)	Power Input	Power Consumption
17"	LDS310D-1P	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	+12V DC	35 W (Typ.)
19"	LDS410D-1P	376.32(H) x 301.056(V)	1280x1024	500:1 (Typ.)	250 nits	-85~85(H); -85~85(V)	+12V DC	35 W (Typ.)
17"	LDS310D-16P	337.92(H) x 270.34(V)	1280x1024	1000:1 (Typ.)	350 nits	-85~85(H); -80~80(V)	+12V DC	35 W (Typ.)
19"	LDS410D-16P	376.32(H) x 301.056(V)	1280x1024	500:1 (Typ.)	250 nits	-85~85(H); -85~85(V)	+12V DC	35 W (Typ.)

Industrial Display

Product

Industrial

Featured

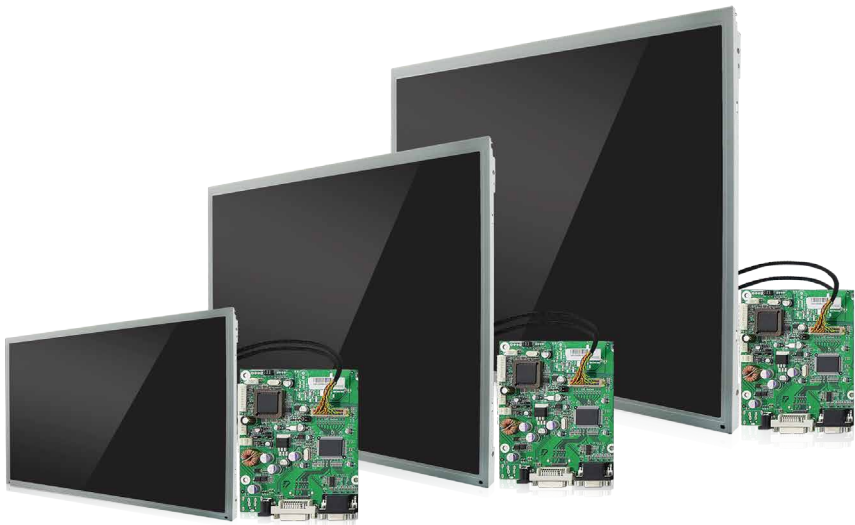
5.7~32" Featured Display

LCD Kit

Custom configuration



HDMI



Application



Exhibition Hall Information Stand

“FOR BRIGHT LIT
LOCATIONS.”

Installed in an exhibition hall and wired with display in the hall to inform visitors about the latest daily schedule, allow them to see overview of the meeting venues and its location.

“ **CREATE YOUR OWN
DISPLAY SOLUTION.** ”

- 5.7~32-inch screen LCD kit solution
- Chassis, open frame, panel mount, front IP65
- Sunlight readable screen



VGA, DVI video input (or VGA, HDMI input)

0°C to 50°C operating temperature

Accessories

Scaler Board	Driver Board	OSD Board	Panel	Panel Cable
LED Driver Cable	OSD Cable			

LCD Kit

High Brightness



Size	Model Name	Active Display Area (mm)	Resolution	Contrast Ratio	Brightness	Viewing Angle (CR≥10)	Optional DVI Input	Power Input	Power Consumption	Resistive	Capacitive	SAW	IR
5.7"	R057-D1HB	115.2(H) x 86.4(V)	640x480	300:1 (Typ.)	900 nits	-70~70 (H); -40~60 (V)	Yes (R2AH)	+12V DC	15 W (Typ.)	*			
7" (17:10)	W070-O1HB	153.6(H) x 90.0(V)	1024x600	700:1 (Typ.)	1000 nits	-75~75 (H); -75~70 (V)	Yes (R2AH)	+12V DC	8 W (Typ.)	*			
8.4"	R084-T1HB	170.4(H) x 127.8(V)	800x600	600:1 (Typ.)	1000 nits	-80~80 (H); -60~80 (V)	Yes (R2AH)	+12V DC	15 W (Typ.)	*		*	
10.1" (17:10)	W101-H1HB	222.72(H) x 125.28(V)	1024x600	800:1 (Typ.)	800 nits	-80~80 (H); -80~75 (V)	Yes (R2AH)	+12V DC	7 W (Typ.)	*			
10.4"	R104-P1HB	211.2(H) x 158.4(V)	800x600	400:1 (Typ.)	1000 nits	-70~70 (H); -70~60 (V)	Yes (R2AH)	+12V DC	15 W (Typ.)	*		*	*
12.1"	R121-M2HB	245.76(H) x 184.32(V)	1024x768	700:1 (Typ.)	1000 nits	-80~80 (H); -70~70 (V)	Yes (R2AH)	+12V DC	17 W (Typ.)	*	*	*	*
15"	R150-C3HB	304.128(H) x 228.096(V)	1024x768	2000:1 (Typ.)	1000 nits	-88~88 (H); -88~88 (V)	Yes (R2AH)	+12V DC	22 W (Typ.)	*	*	*	*
17"	R170-A1HB	337.92(H) x 270.336(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85 (H); -80~80 (V)	Yes (R2AH)	+12V DC	32 W (Typ.)	*	*	*	
19"	R190-A1HB	376.32(H) x 301.06(V)	1280x1024	1000:1 (Typ.)	1000 nits	-85~85 (H); -80~80 (V)	Yes (R2AH)	+12V DC	31 W (Typ.)	*	*	*	
15.6" (16:9)	W156-A2HB	344.232(H) x 193.536(V)	1366x768	500:1 (Typ.)	1300 nits	-85~85 (H); -80~80 (V)	Yes (R2AH)	+12V DC	25 W (Typ.)	*			
21.5" (16:9)	W215-A3HB	476.64(H) x 268.11(V)	1920x1080	1000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes (R2AH)	+12V DC	50 W (Typ.)	*			
24" (16:9)	W238-A2HB	527.04(H) x 296.46(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes (R2AH)	+12V DC	65 W (Typ.)	*			
27" (16:9)	W270-A1HB	597.6 (H) x 336.15 (V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes (R2AH)	+12V DC	70 W (Typ.)	*			
32" (16:9)	W320-A3HB	698.4 (H) x 392.85(V)	1920x1080	3000:1 (Typ.)	1000 nits	-89~89 (H); -89~89 (V)	Yes (R2AH)	+12V DC	75 W (Typ.)	*			

Industrial Display

Product

Industrial

Featured





DIGITAL SIGNAGE

Digital Signage

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OPS Solution

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Digital Signage

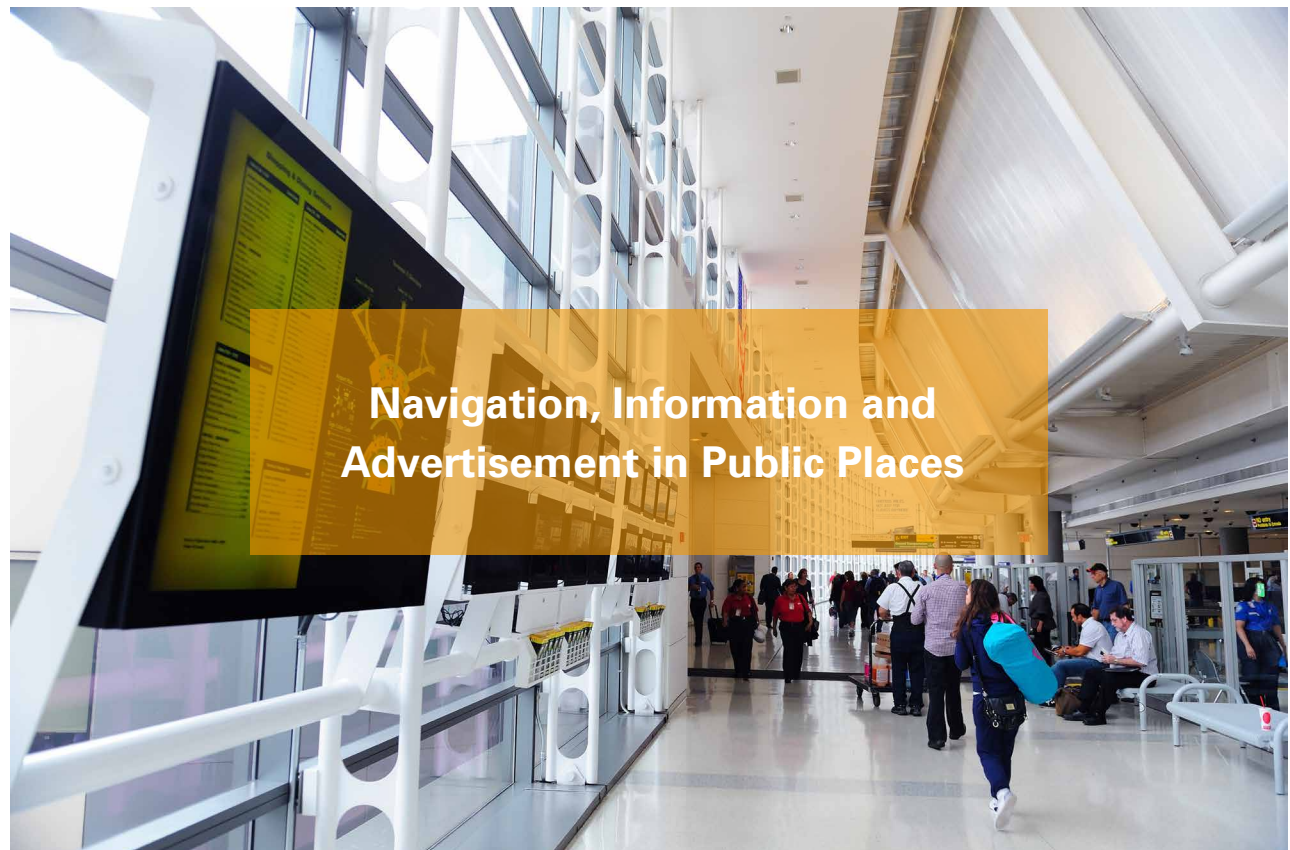
Overview

Winmate provides digital signage solutions for intelligent, cost-effective, and easily integrated modular signs. All Winmate digital signage players come pre-loaded with an embedded OS. Through video walls, our embedded players are ideal for multi-display applications in stores, lobbies, restaurants, hotels and other public spaces.

Our digital signage solution include:

- The latest Android™, Windows® operating system
- Bar-type stretched panel PC and display
- Embedded player and digital signage box PC

Backed by high picture quality, Winmate digital signage solution brings creative ideas to life, and enable businesses to deliver engaging and informative content in public places.



Product Overview

Bar-Type Panel PC and Display

Our Bar-Type Display and Panel PC are available in a variety of sizes, configurations, and brightness options making them a perfect versatile solution for industrial and commercial advertising, especially in areas with high traffic and restricted, atypical shaped spaces.



Features

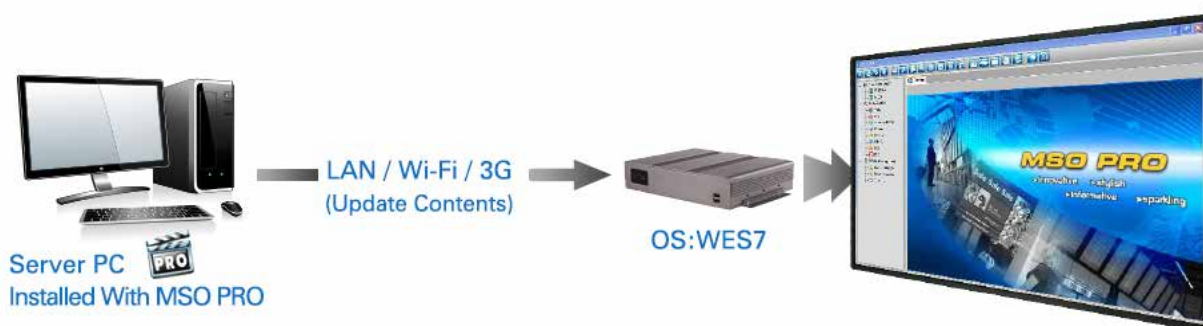
- 19", 27.6", 28.6" and 38"
- Projected capacitive or resistive touch screen
- VESA mount for wall mounting
- Fit in unusual locations with atypical dimensions

Winmate Bar Type Display and Panel PC are utilized in retail, advertising, public transportation, commercial buildings, quick-service restaurants and other applications.

Digital Signage Embedded Player and Box PC

Winmate offers digital signage player and box PC bundled with signage management software - MSO Pro for your embedded applications.

Digital Signage Box PC Application Diagram



Product

Bar-Type

Box PC

OPS
Series

19~38" Digital Signage Display & Panel PC

Bar-Type

Custom configuration



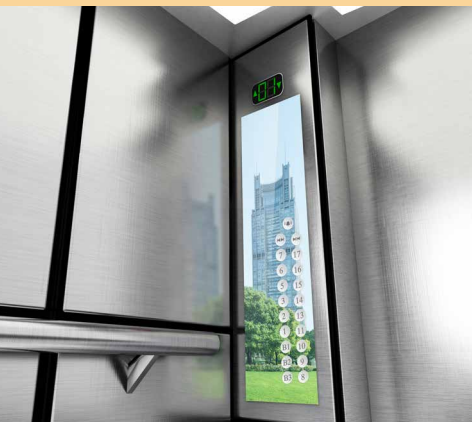
PoE



AR Glass



Application



Elevator Signage

"ULTRA-WIDE
STRETCHED LCD."

Digital signage solution for a full-length elevator interface offers greater flexibility in functionality and advertising.

“ **ULTRA HD PANORAMIC
VIEW.** ”

- 19/27.6/28.6/38-inch screen
- Intel® Celeron® N2930 Bay Trail-M
- Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core
- Windows 10/8/7
- Android 6.0
- Display configuration



Fanless cooling system

High brightness

Wide aspect ratio

1W Speaker

Open frame, chassis

VESA mount

Front IP54, 0°C to 50°C operating temperature

Accessories

Power Cord

AC Adapter

Driver CD

Bar-Type Display

Open Frame, Chassis



		27.6"	28.6"	38"
Model Name	Open Frame	W27L100-OFC1	W28L100-OFA2	W38L100-OFA1
	Chassis	W27L100-CHC1	W28L100-CHA2	W38L100-CHA1
Display				
Resolution		1920 x 360	1920 x 540	1920 x 540
Brightness		1000 nits	1000 nits	1000 nits
Contrast Ratio		1000:1 (Typ.)	1000:1 (Typ.)	4000:1 (Typ.)
Active Area		688.896 (H) x 129.168 (V)	222.72 (H) x 125.28 (V)	210.4 (W) x 157.8 (H)
Viewing Angle		-85~85 (H); -85~85 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Display Color		16.7M	16.7M	16.7M
Touch		Resistive, SAW, P-cap (Optional)	Resistive, SAW, P-cap (Optional)	Resistive, SAW, P-cap (Optional)
Connectors				
VGA		1 x VGA	1 x VGA	1 x VGA
DVI		1 x DVI	1 x DVI	1 x DVI
HDMI		1 x HDMI	1 x HDMI	1 x HDMI
Mechanical				
Chassis Dimensions		727.6 x 179.2 x 75 mm	736.5 x 234.4 x 70 mm	928.3 x 282.1 x 69.0 mm
Open Frame Dimensions		727.6 x 191.5 x 64 mm	734.0 x 252.0 x 51 mm	954.0 x 306.0 x 66.0 mm
Mounting		VESA Mount	VESA Mount	VESA Mount
Power				
Power Input		+12V DC	+12V DC	+12V DC
Power Consumption		40W (Typ.)	40W (Typ.)	75W (Typ.)
AC Adapter		AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Certifications				
Safety		CE, FCC	CE, FCC	CE, FCC

Digital Signage

Product

Bar-Type

Box PC

OPS
Series

Bar-Type Android Panel PC

Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core



Model Name	27.6"	28.6"	38"
	W27FA3S-CHC1	W28FA3S-CHA2	W38FA3S-CHA1
Display			
Resolution	1920 x 360	1920 x 540	1920 x 540
Brightness	1000 nits	1000 nits	700 nits
Contrast Ratio	1000:1(Typ.)	1000:1 (Typ.)	4000:1 (Typ.)
Viewing Angle	-85~85 (H);-85~85 (V)	-89~89 (H);-89~89 (V)	-89~89 (H);-89~89 (V)
Display Color	16.7M	16.7M	16.7M
System			
Processor	Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core 1GHz	Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core 1GHz	Freescale™ Arm® Cortex®-A9 i.MX6 Dual-core 1GHz
System Memory	1GB LPDDR3	1GB LPDDR3	1GB LPDDR3
Storage	Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card	Onboard 16GB eMMC, Micro SD card
OS	Android 6.0 (Default) Linux Kernel 4.1.15,QT 5.5 Browser (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15,QT 5.5 Browser (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15,QT 5.5 Browser (Optional)
Connectors			
Ethernet	1 x RJ45 10/100/1000 LAN	1 x RJ45 10/100/1000 LAN	1 x RJ45 10/100/1000 LAN
Serial Interface	1 x RS-232 (Optional 422/485)	1 x RS-232 (Optional 422/485)	1 x RS-232 (Optional 422/485)
USB	1 x USB 2.0 host, 1 x USB OTG	1 x USB 2.0 host, 1 x USB OTG	1 x USB 2.0 host, 1 x USB OTG
CANBus	1 x CANBus	1 x CANBus	1 x CANBus
Others	1 x Console Port (Linux use) 1 x Micro SD Card Slot	1 x Console Port (Linux use) 1 x Micro SD Card Slot	1 x Console Port (Linux use) 1 x Micro SD Card Slot
Power	1 x Terminal Block (Phoenix Type)	1 x Terminal Block (Phoenix Type)	1 x Terminal Block (Phoenix Type)
Mechanical			
Dimensions	727.6 x 179.2 x 75 mm	740.6 x 175.6 x 72 mm	972.5 x 284.5 x 71.6 mm
Mounting	VESA Mount 200 x 100 mm	VESA Mount 200 x 100 mm	VESA Mount 400 x 100, 200 x 100 mm
Cooling System	Fanless design	Fanless design	Fanless design
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)
Power			
Power Input	+9~24V DC	+9~24V DC	+9~24V DC
Power Consumption	72.5W (Typ.)	72.5W (Typ.)	85W (Typ.)
AC Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Bar-Type Windows PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	27.6"	28.6"	38"
	W27IB3S-CHC1	W28IB3S-CHA2	W38IB3S-CHA1
Display			
Resolution	1920 x 360	1920 x 540	1920 x 540
Brightness	1000 nits	1000 nits	700 nits
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)	4000:1 (Typ.)
Viewing Angle	-85~85 (H); -85~85 (V)	-89~89 (H); -89~89 (V)	-88~88 (H); -88~88 (V)
Display Color	16.7M	16.7M	16.7M
System			
Processor	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz
Chipset	Intel Atom® SoC	Intel Atom® SoC	Intel Atom® SoC
System Memory	1 x SODIMM DDR3L 1600, max. 8GB	1 x SODIMM DDR3L 1600, max. 8GB	1x SODIMM DDR3L 1600, max. 8GB
Storage	64GB mSATA SSD, Max 512GB	64GB mSATA SSD, Max 512GB	64GB mSATA SSD, Max 512GB
Graphic Chipset	Intel® HD Graphics Engine	Intel® HD Graphics Engine	Intel® HD Graphics Engine
Ethernet	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN
Audio	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec
OS	Windows Embedded Standard 7 Windows 7 Pro for Embedded Windows Embedded 8.1 Industry Pro Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows 7 Pro for Embedded Windows Embedded 8.1 Industry Pro Windows 10 IoT Enterprise	Windows Embedded Standard 7 Windows 7 Pro for Embedded Windows Embedded 8.1 Industry Pro Windows 10 IoT Enterprise
Connectors			
Ethernet	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps	2 x RJ45 10/100/1000 Mbps
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
USB	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0
Display output	1 x HDMI	1 x HDMI	1 x HDMI
Power	1 x Terminal Block (Phoenix Type)	1 x Terminal Block (Phoenix Type)	1 x Terminal Block (Phoenix Type)
Mechanical			
Dimensions	727.6 x 179.2 x 75 mm	736.5 x 234.4 x 70 mm	928.3 x 282.1 x 69 mm
Mounting	VESA Mount 200 x 100 mm	VESA Mount 200 x 100 mm	VESA Mount 200 x 100 mm, 400 x 100 mm
Cooling System	Fanless design	Fanless design	Fanless design
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Power			
Power Input	+9~36V DC	+9~36V DC	+9~36V DC
Power Consumption	72.5W (Typ.)	72.5W (Typ.)	85W (Typ.)
AC Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Digital Signage

Product

Bar-Type

Box PC

OPS Series

Digital Signage

Embedded Player

Custom configuration



3G Module



Additional
Storage



RS-232C



Wi-Fi



Application



Department Store

“CONTENT DELIVERY
FOR CUSTOMER
ENGAGEMENT.”

Display dynamic and
eye-catching product
advertisements on digital
screens located on-shelf or in
aisles.

“ **ENHANCE CUSTOMER
ENGAGEMENT.** ”

- Multi HD resolution 1080 pixel
- Low power consumption
- Wireless capabilities



Fanless cooling system

1 GB Storage

USB 2.0

DVI-I, VGA, S-Video, Composite

RJ45

Real Time RSS Feed

MPEG1, MPEG2, MPEG4, WMV9, DAT, VOB, Divx, Xvid, H.264

JPEG, BMP, PNG

Text banner variable scrolling speed and position

Front IP65, -20°C to 60°C Operating Temperature

Accessories

Power Cord

AC Adapter

Drive CD

Content Management Software

DVI Cable

Digital Signage Embedded Player



Model Name	MSS550	MSS550-3G
System		
Storage Media	1GB, optional with bigger capacity up to 40GB (Need to be Linux ext2 format)	1GB, optional with bigger capacity up to 40GB (Need to be Linux ext2 format)
Content Update	Ethernet/WLAN/USB flash drive	Ethernet/3G/USB flash drive
Connectors		
Ethernet	1 x RJ45 10/100/Mbps	1 x RJ45 10/100/Mbps and 3G
USB	USB 2.0 for Flash Storage Drive	USB 2.0 for Flash Storage Drive
Audio Output	Stereo Phone jack	Stereo Phone jack
Video Output	DVI-I/VGA/S-video/Composite	DVI-I/VGA/S-video/Composite
Mechanical		
Dimensions	258 x 127 x 47 mm	258 x 127 x 47 mm
Weight	1.0 kg	1.0 kg
Environment		
Operating Temp.	-20°C to 60°C	-20°C to 60°C
Humidity	5% to 85% @50°C	5% to 85% @50°C
Power		
Power Input	+12V DC	+12V DC
Power Consumption	5W (Typ.)	5W (Typ.)
AC Adapter	AC+100~240V, Universal, 10%	AC+100~240V, Universal, 10%
Wireless Communications		
Wi-Fi	Via half mini PCIe Card (Optional)	Via half mini PCIe Card (Optional)
3G	Via half mini PCIe Card (Optional)	Via half mini PCIe Card
Certifications		
Safety	CE, FCC	CE, FCC

Digital Signage Box PC

Custom configuration

3G

3G Module



Additional
Storage



RS-232C



Wi-Fi



Application



Hotel Lobby

“DISPLAY ONLY
RELEVANT
INFORMATION.”

Winmate embedded signage box PC with Wi-Fi module and chassis display were installed in a hotel lobby to display current exchange rate, weather information and advertisement.

“ **BROADCAST ONLY
RELEVANT CONTENT.** ”

- Intel Atom® Dual-core D2550
- Intel® Celeron® N2930 Bay Trail-M
- Intel® Core™ i5-4200M
- Flexible storage devices
- Content syncronization with Zone Sync



Two USB 2.0

VGA, RS-232

RJ45

MPEG 1/2/4, AVI, WMV, Divx, Xvid

MP3, WAV, WMA

JPEG, BMP, PNG

Text banner variable scrolling speed and position

0°C to 45°C operating temperature

Accessories

Power Cord

AC Adapter

Drive CD

Content Management Software

DVI Cable

Digital Signage Box PC

Intel Atom® Dual-core D2550

Intel® Celeron® N2930 Bay Trail-M

Intel® Core™ i5-4200M



Model Name	MSS970-I1	MSS970-IB	MSS970-IH
System			
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® Celeron® N2930 Bay Trail-M, 1.83 GHz	Intel® 4th i7/i5/i3 Socket rPGA947 processor (Haswell), Default Core i5-4200M 2.5GHz (Turbo max up to 3.1GHz)
BIOS	AMI UEFI BIOS	AMI UEFI BIOS	AMI BIOS
System Chipset	NM10	Intel Atom® SoC Integrated	Intel® 8 series Chipset (Q 87)
System Memory	Dual DDR3 800/1066 MHz SO-DIMM Slot, Max.4GB	Dual DDR3L 1066/1333 MHz SO-DIMM Slot, Max. 8GB	2 x SODIMM, Max 16GB DDR3L 1333/1600 z (Default 4GB)
Graphic Chipset	Integrated Graphic	Integrated Graphic	Intel® HD Graphic 4600
Ethernet	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN	Intel® I210IT Gigabit-LAN Controller+ I218LM Gigabit-LAN PHY
Audio	Realtek Audio Codec	Realtek Audio Codec	Realtek Audio Codec
File Support			
Video	MPEG 1/2/4, AVI, WMV, Divx, Xvid	MPEG 1/2/4, AVI, WMV, Divx, Xvid	MPEG 1/2/4, AVI, WMV, Divx, Xvid
Audio	MP3, WAV, WMA	MP3, WAV, WMA	MP3, WAV, WMA
Images	JPG, BMP, PNG, GIF	JPG, BMP, PNG, GIF	JPG, BMP, PNG, GIF
Flash	SWF, FLV	SWF, FLV	SWF, FLV
MS PowerPoint	PPT (Slide show)	PPT (Slide show)	PPT (Slide show)
HTML	HTML	HTML	HTML
Connectors			
USB	2 x USB 2.0, 4 x USB 2.0 (Internal)	2 x USB 2.0; 1 x USB 3.0, 3 x USB 2.0 (Internal)	2 x USB 2.0; 1 x USB 3.0, 3 x USB 2.0 (Internal)
Serial Interface	• 2 x RS-232 Connector 9p DSUB (Male) • 1 x RS-232 Connector 9p DSUB (Male) (Optional) • 1 x RS-232/422/485 9p DSUB (Male)	• 3 x RS-232 Connector (Male) • 1 x RS-232/422/485 9P DSUB (Male)	• 2 x RS-232 Connector • 1 x RS-232/422/485 Connector • 1 x RS-232 (Optional)
Power	1 x DC-IN Power Jack	1 x DC-IN Power Jack	1 x DC-IN Power Jack
Ethernet	2 x RJ45 (Gigabit Ethernet)	2 x RJ45 (Gigabit Ethernet)	2 x RJ45 (Gigabit Ethernet)
VGA	1 x VGA 15p DSUB (Female)	1 x VGA 15p DSUB (Female)	1 x VGA 15p DSUB (Female)
Audio	1 x Line in/Line out/Mic in	1 x Line in/Line out/Mic in	1 x Line in/Line out/Mic in
Mouse/Keyboard	2 x PS/2	2 x PS/2	2 x PS/2
User Controls			
LED	1 x Power/HDD LED	1 x Power/HDD LED	1 x Power/HDD LED
Control Buttons	1 x Power Reset Button 1 x Power on Button	1 x Power Reset Button 1 x Power on Button	1 x Power Reset Button 1 x Power on Button
Power			
Power Input	+12V DC (Lockable, Power Jack)	+12V DC (Lockable, Power Jack)	+12V DC (Lockable, Power Jack)
Power Consumption	5W (Typ.)	5W (Typ.)	5W (Typ.)
Environment			
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 50°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Wireless Communications			
Wi-Fi	Via half mini PCIe Card (Optional)	Via half mini PCIe Card (Optional)	Via half mini PCIe Card (Optional)
3G	Via half mini PCIe Card (Optional)	Via half mini PCIe Card (Optional)	Via half mini PCIe Card (Optional)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

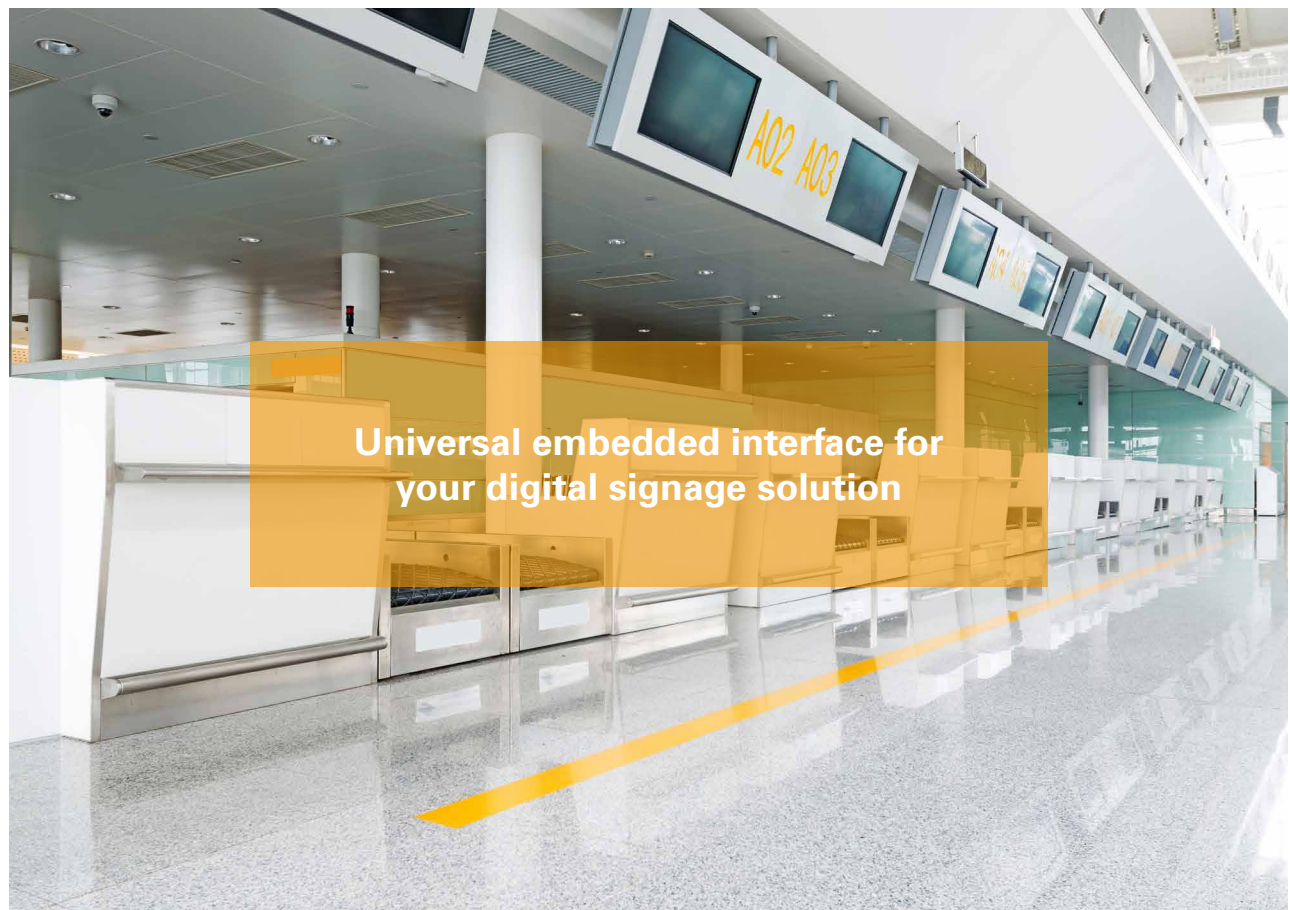
OPS Solution

Overview

The Open Pluggable Specification (OPS) was created by Intel® to address fragmentation in the digital signage market and simplify device installation, use, maintenance and upgrades. It involves the integration concept of a pluggable module into the display panel through a single and standard interfacing based on the 80-pin JAE plug and receptacle connectors.

Nowadays, more and more applications need all-in-one solutions to make the system look compact and save space. Using the traditional way, most manufacturers combine panel and motherboard or other main boards to form an all-in-one solution. The OPS solution digital signage intends to separate display and system, making them as independent modules to increase scalability and reliability.

Intel's OPS (Open Pluggable Specification) offers an universal, embedded interface which can link external media players with a large video display, thus providing users with integration of their signage and conferencing applications.



Product

Bar-Type

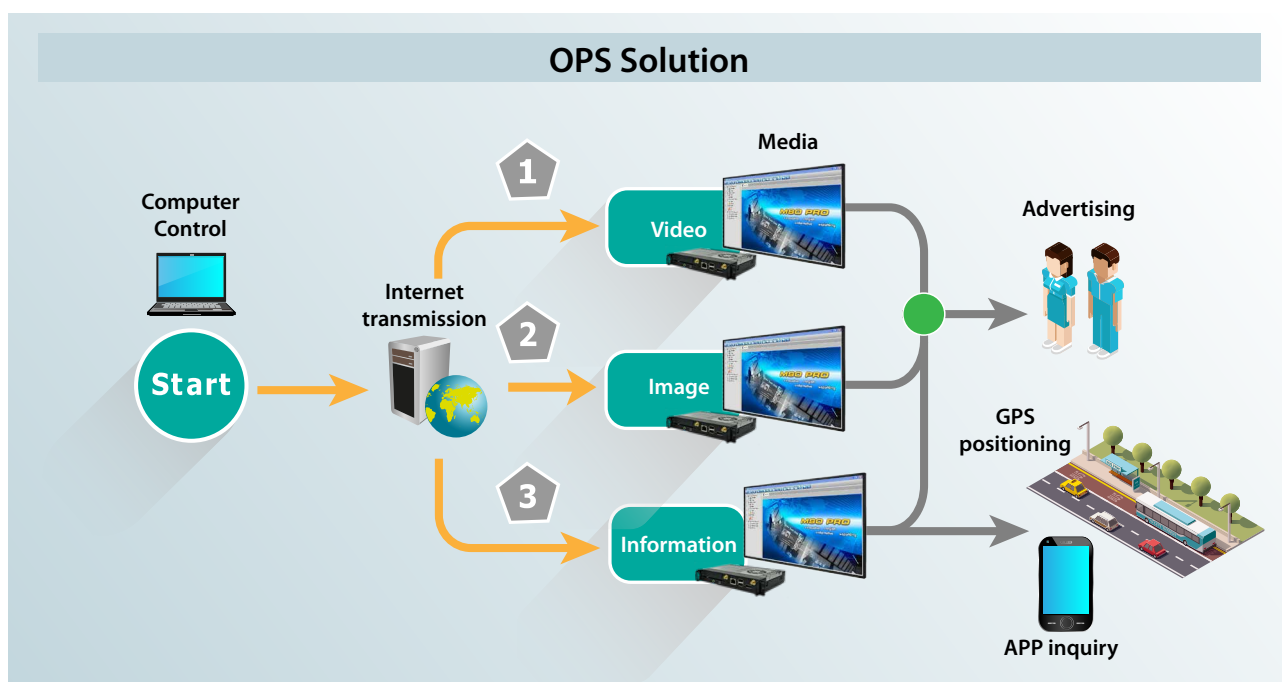
Box PC

OPS
Series

Technology

When most people think about transportation digital signage, they envision fixed, indoor screens in a secure, static environment. But more and more transportation facilities now use digital signage both in terminals as well as on-board transportation vehicles, including buses, cars, trains and planes. Transportation services businesses are beginning to understand that the customers' experience is greatly enhanced by utilizing digital displays.

OPS Solution Diagram:



42/55" Android/Windows Panel PC OPS Solution

Custom configuration



Additional
Storage



3G Module



Wi-Fi



**“ BETTER VISUALIZATION FOR
ADVERTISING. ”**

Application



Subway Escalator Advertising

“EFFICIENT TOOL FOR
PUBLIC PLACES.”

Broadcast advertisements
and important messages
are displayed on a large
screen inside the subway
station using Winmate's OPS
Solution.

- 42/55-inch screen with P-Cap touch
- Intel® Core™ i5-5250U Broadwell
- Freescale™ Arm® Cortex®-A9 i.MX 6 Quad-core
- Windows 7/8/10 or Android



Fanless cooling system

500 GB 2.5" HDD

Mini D-Sub, 1 x RCA L/R in/out, DVI in/out

Component Video Input

HDMI, Display Port 1.2

RS-232 in/out, RJ45

VESA mount

0°C to 45°C operating temperature

Accessories

Power Cord

AC Adapter

Drive CD

OPS Android/Windows Panel PC

Intel® Core™ i5-5250U Broadwell

Freescale™ Arm® Cortex®-A9 i.MX 6 Series Quad-core



Model Name	42" (16:9)	42" (16:9)	55" (16:9)	55" (16:9)
	W42L100-OML2/OMIW	W42L100-OML2/OMFA	W55L100-OML2/OMIW	W55L100-OML2/OMFA
Display				
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Brightness	500 nits	500 nits	500 nits	500 nits
Contrast Ratio	1300:1 (Typ.)	1300:1 (Typ.)	1300:1 (Typ.)	1300:1 (Typ.)
Viewing Angle	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Display Color	16.7M	16.7M	16.7M	16.7M
Touch	SAW touch	SAW touch	-	-
System				
Processor	Intel® Boardwell Core i5-5250U	Freescale™ Arm® Cortex®-A9 i.MX 6 (Quad-core)	Intel® Boardwell Core i5-5250U	Freescale™ Arm® Cortex®-A9 i.MX 6 (Quad-core)
System Chipset	SoC	SoC	SoC	SoC
BIOS	AMI BIOS	-	AMI BIOS	-
System Memory	4GB SO-DIMM DDR3 1600, up to 8GB	1GB DDR3	4GB SO-DIMM DDR3 1600, up to 8GB	1GB DDR3
Storage	2.5" HDD 500GB	16GB eMMC, 2.5" SATA HDD/SSD (Optional)	2.5" HDD 500GB	16GB eMMC, 2.5" SATA HDD/SSD (Optional)
Graphic Chipset	Intel® HD Graphic 5500	Integrated Graphic	Intel® HD Graphic 5500	Integrated Graphic
Ethernet	Intel® Gigabit-LAN DHY I218	Gigabit Ethernet LAN	Intel® Gigabit-LAN DHY I218	Gigabit Ethernet LAN
Audio	Realtek ALC 283 codec	Mic in/Headphone	Realtek ALC 283 codec	Mic in/Headphone
OS	Windows 10 IoT Enterprise, Windows Emb. 8.1 Industry Pro, Windows Embedded Std.7, Windows 7 PRO for Emb. System	Android 4.4	Windows 10 IoT Enterprise, Windows Emb. 8.1 Industry Pro, Windows Embedded Std.7, Windows 7 PRO for Emb. System	Android 4.4
Display Connectors				
Mini D-sub	1 x Mini D-sub 15pin In	1 x Mini D-sub 15pin In	1 x Mini D-sub 15pin In	1 x Mini D-sub 15pin In
RCA	1 x RCA L/R In, 1 x RCA L/R Out	1 x RCA L/R In, 1 x RCA L/R Out	1 x RCA L/R In, 1 x RCA L/R Out	1 x RCA L/R In, 1 x RCA L/R Out
DVI	1 x DVI-D In, 1xDVI-I Out	1 x DVI-D In, 1xDVI-I Out	1 x DVI-D In, 1xDVI-I Out	1 x DVI-D In, 1xDVI-I Out
Audio	1 x Audio Jack	1 x Audio Jack In	1 x Audio Jack	1 x Audio Jack In
Component	1 x Component Video In	1 x Component Video In	1 x Component Video In	1 x Component Video In
RS-232	1 x RS-232 In, 1 x RS-232 Out	1 x RS-232 In, 1 x RS-232 Out	1 x RS-232 In, 1 x RS-232 Out	1 x RS-232 In, 1 x RS-232 Out
HDMI	1 x HDMI In	1 x HDMI In	1 x HDMI In	1 x HDMI In
LAN	1 x LAN	1 x LAN	1 x LAN	1 x LAN
Display Port	1 x Display port 1.2	1 x Display port 1.2	1 x Display port 1.2	1 x Display port 1.2
OPS Module Connectors				
Ethernet	1 x RJ45	1 x RJ45	1 x RJ45	1 x RJ45
USB	2 x USB 3.0	1 x USB OTG, 2 x USB 2.0 Host	2 x USB 3.0	1 x USB OTG, 2 x USB 2.0 Host
Audio	2 x Audio phone jack	1 x Mic in, 1 x Line out	2 x Audio phone jack	1 x Mic in, 1 x Line out
Control Buttons	Reset, Power	-	Reset, Power	-
Power				
Power Consumption	130W (Typ.)	130W (Typ.)	140W (Typ.)	145W (Typ.)
Power Input	+110~240V AC	+110~240V AC	+110~240V AC	+110~240V AC
Mechanical				
Dimensions	947 x 541 x 56.8 mm	947 x 541 x 56.8 mm	1228 x 689.9 x 71.1 mm	1228.1 x 698.9 x 71.1
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Environment				
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	20% to 80% (Non-condensing, RH)	20% to 80% (Non-condensing, RH)	20% to 80% (Non-condensing, RH)	20% to 80% (Non-condensing, RH)
Wireless Communications				
Wi-Fi	Optional	Optional	Optional	Optional
3G	Optional	Optional	Optional	Optional
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Digital Signage

Product

Bar-Type

Box PC

OPS Series

OPS PC Module

OPS Solution

Custom configuration



Additional
Storage

3G

3G Module



Wi-Fi



Application



Automatic Teller Machine Displays

"EASY INSTALLATION,
MAINTENANCE AND
UPGRADES."

Box PCs with a rugged design
to ease financial transactions
process and accurately render
private banking customer's
data on the information
display.

“ **STREAMLINE DIGITAL
SIGNAGE APPLICATIONS.** ”

- Intel® Core™ i5-5250U
- Freescale™ Arm® Cortex®-A9 i.MX6Q
- Windows 10/8/7 or Android



Fanless cooling system

JAE 80-pin connector

500 GB 2.5" HDD

USB 3.0

RJ45, Display Port 1.2

Two audio phone jack (Line in/Line out)

Front IP65, 0°C to 50°C operating temperature

Accessories

Power Cord

Adapter

Drive CD

OPS PC Module

Intel® Core™ i5-5250U Broadwell

Freescale™ Arm® Cortex®-A9 i.MX 6 Series Quad-core



Model Name	OMIW-OPS	OMFA-OPS
System		
Processor	Intel® Broadwell® Core™ i5-5250U	Freescale™ Arm® Cortex®-A9 i.MX 6 Series Quad-core 1GHz
BIOS	AMI System BIOS	N/A
Chipset	SoC Integrated	N/A
System Memory	SO-DIMM DDR3L-1600, up to 8GB (Default 4GB)	DDR3 1GB
Storage	Removable 2.5 SATA Drive Bay (Default 2.5" HDD 500GB)	On board 16GB eMMC, 1 x 2.5" 2.5" SATA HDD/SSD (Optional)
Graphic Chipset	Intel® HD Graphic 5500	Integrated Graphics
Ethernet	Intel® Gigabit-LAN DHY I218	Gigabit Ethernet LAN
Audio	Realtek ALC 283 codec	
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Std.7 Windows 7 PRO for Embedded System	Android 4.4
Connectors		
Ethernet	1 x RJ45 Giga GbE	1 x RJ45
Serial Interface	-	
USB	2 x USB 3.0	2 x USB 2.0 Host 1 x USB 2.0 OTG
HDMI	-	-
Display Port	1 x Display Port 1.2	-
Audio	2 x Audio phone jack (Line in/Line out)	2 x Audio Jack (Line in/Line out)
Control Buttons	1 x Power button 1 x Reset button	1 x Power button 1 x Reset button
Internal		
Mini PCIe	1 x Mini PCIe (For Wi-Fi or 3G module)	1 x Mini PCIe (For Wi-Fi or 3G module)
Rear Side		
OPS Interconnector	1 x JAE 80-Pin connector (Follows OPS standard)	1 x JAE 80-Pin connector (Follows OPS standard)
Environment		
Operating Temp.	0°C to 55°C	-10°C to 60°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Mechanical		
Dimensions	200 x 30 x 118 mm (OPS compliant)	200 x 30 x 118 mm (OPS compliant)
Mounting	OPS Standard	OPS Standard
Cooling System	System fan	Fanless design
Power		
Power Input	+12~19V DC (Via OPS interconnection)	+12~19V DC (Via OPS interconnection)
Power Consumption	25W (Burn-in test)	10W (Burn-in Test)
Certifications		
Safety	CE, FCC	CE, FCC



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Stainless

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Stainless

Overview

Whether it be the actual processing of the food or the packaging of the food, automation is everywhere in today's modern food plants. Plant floor automation helps keep costs down and food quality up.

Over the years, Winmate has developed computing solutions for vertical markets. The Stainless series was developed for food processing, packaging and pharmaceutical manufacturing industries where there is a need for water resistant and easy-to-clean devices.

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical



**Increasing efficiencies in food processing
industries with hygienic, easy to clean
Winmate solutions**

Stainless

Technology

Signature True Flat Design

Easy to maintain and clean, to prevent water or liquid droplets penetrating any openings in the device.

Flat P-Cap Design

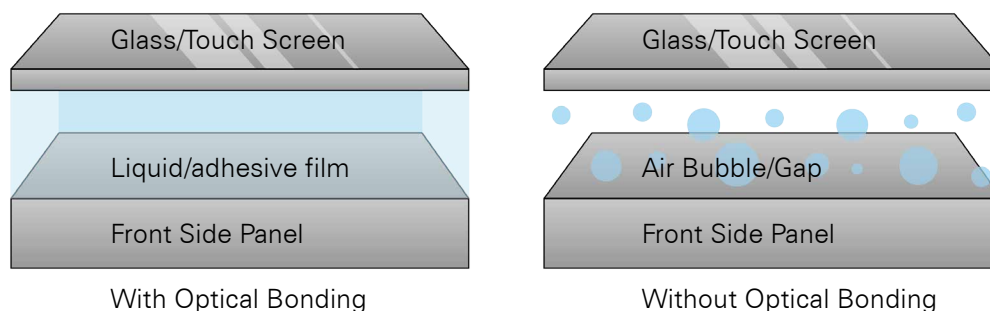


Resistive Design



Optical Bonding

Optical bonding is a process that uses optically clear resin – OCR (i.e. liquid adhesive, optical resin), or optically clear adhesive – OCA (i.e. transparent adhesive film, optical transfer tape), to affix a protective glass overlay or touch screen to the front of an LCD. Filling the air gap between the overlay and the LCD reduces speculation (bouncing light) between the surfaces, thereby increasing contrast, color quality and viewing angles. This process is especially important for displays that are used outdoors or in places with bright sunlight.



Optional Configuration



Memory



Storage



AR Glass

Application



Food Production

“FAST PRODUCT
DEPLOYMENT.”

Sealed to IP69K Winmate's
15-inch stainless panel PC
was deployed as a machine
controller in the food
production line.

10.4~21.5" Stainless Panel PC & Display IP69K/IP67/IP65 Series



“ **WITHSTANDS HIGH
PRESSURE WASHDOWNS.
EASY-TO-CLEAN.** ”

- 10.4~21.5-inch screen
- Intel® Core™ i5-7200U Kaby Lake
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/8/7
- Display configuration



Fanless cooling system

Stainless steel housing SUS304

Supports glove mode

Two USB Type-A

RS-232, RJ45

Lockable power input

VESA mount

IP69K/IP67/IP65

0°C to 45°C Operating Temperature

Accessories

RS-232 Cable

VGA Cable

USB Cable

Power Cable

Driver CD

IP69K Panel PC

Intel® Core™ i5-7200U Kaby Lake



Model Name	15"	19"	21.5" (16:9)
	R15IK3S-SPC369	R19IK3S-SPM169	W22IK3S-SPA369
Display			
Resolution	1024 x 768	1280 x 1024	1920 x 1080
Brightness	250 nits	250 nits	250 nits
Contrast Ratio	700 : 1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-80~80 (H); -70~70 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass
System			
Processor	Intel® Core™ i5-7200U, 2.5GHz	Intel® Core™ i5-7200U, 2.5GHz	Intel® Core™ i5-7200U, 2.5GHz
BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated
Memory	1 x DDR4 2133MHz 4GB (Default), max. 16GB	1 x DDR4 2133MHz 4GB (Default), max. 16GB	1 x DDR4 2133MHz 4GB (Default), max. 16GB
Storage	64GB M.2 B Key SATA III SSD (Options up to 256GB)	64GB M.2 B Key SATA III SSD (Options up to 256GB)	64GB M.2 B Key SATA III SSD (Options up to 256GB)
Ethernet Controller	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors			
Serial Interface	1 x RS-232	1 x RS-232	1 x RS-232
LAN	1 x LAN	1 x LAN	1 x LAN
USB	2 x USB	2 x USB	2 x USB
Power	1 x Locable Power Jack	1 x Locable Power Jack	1 x Locable Power Jack
Mechanical			
Dimensions	378 x 301 x 56.4 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Proof	Full IP69K, air venting valve	Full IP69K, air venting valve	Full IP69K, air venting valve
Mounting	VESA Mount	VESA Mount	VESA Mount
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Consumption	52W (Typ.)	56W (Typ.)	66W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

IP69K Panel PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	10.4"	15"	19"	21.5" (16:9)
	R10IB3S-SPT269	R15IB3S-SPC3	R19IB3S-SPM1	W22IB3S-SPA3
Display				
Resolution	1024 x 768	1024 x 768	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	250 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	304.1 (H) x 228.1 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88(H); -88~88(V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.2M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)
System				
Processor	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz
BIOS	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash
Chipset	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate
Memory	1 x SODIMM, DDR3L 1600 (Default 4GB)	1 x SODIMM, DDR3L 1600 (Default 4GB)	1 x SODIMM, DDR3L 1600 (Default 4GB)	1 x SODIMM, DDR3L 1600 (Default 4GB)
Storage	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)
Ethernet Controller	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7
Connectors				
Serial Interface	1 x RS-232	1 x RS-232	1 x RS-232	1 x RS-232
LAN	1 x LAN	1 x LAN,	1 x LAN	1 x LAN
USB	2 x USB	2 x USB	2 x USB	2 x USB
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical				
Dimension	289 x 246 x 49.9 mm	378 x 301 x 56.4 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Proof	Full IP69K, air venting valve	Full IP69K, air venting valve	Full IP69K, air venting valve	Full IP69K, air venting valve
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power				
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	33W (Typ.)	38W (Typ.)	45W (Typ.)	56W (Typ.)
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

IP69K Display



Model Name	10.4"	15"	19"	21.5" (16:9)
	R10L100-SPT2	R15L100-SPC3	R19L100-SPM1	W22L100-SPA3
Display				
Resolution	1024 x 768	1024 x 768	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	250 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88(H); -88~88(V)	-85~85 (H); -80~80(V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.2M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)
Connectors				
VGA	1 x VGA	1 x VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D (Optional)	1 x DVI-D (Optional)	1 x DVI-D (Optional)	1 x DVI-D (Optional)
USB	1 x USB for Touch	1 x USB for Touch	1 x USB for Touch	1 x USB for Touch
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical				
Dimension	289 x 246 x 49.9 mm	378 x 301 x 56.4 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Proof	Full IP69K, air venting valve	Full IP69K, air venting valve	Full IP69K, air venting valve	Full IP69K, air venting valve
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power				
Power Input	+12V DC (Lockable Power Jack)	+12V DC (Lockable Power Jack)	+12V DC (Lockable Power Jack)	+12V DC (Lockable Power Jack)
Power Consumption	26W (Typ.)	30W (Typ.)	36W (Typ.)	50W (Typ.)
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

IP67 Panel PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	10.4" TFT	15"	19"
	R10IB3S-67T2ST	R15IB3S-67C3ST	R19IB3S-67A1ST
Display			
Resolution	1024 x 768	1280 x 768	1280 x 1024
Brightness	350 nits	250 nits	400 nits
Contrast Ratio	1200 : 1 (Typ.)	700 : 1 (Typ.)	1000 : 1 (Typ.)
Active Area	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)	376.32 (H) x 301.056 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88 (H); -88~88(V)	-88~88 (H); -88~88 (V)
Display Color	16.2M	16.2M	16.7M
Touch	5 Wire Resistive (Optional), AR Glass (Optional)	5 Wire Resistive (Optional), AR Glass (Optional)	5 Wire Resistive (Optional), AR Glass (Optional)
System			
Processor	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz
BIOS	AMI UEFI BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Chipset	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate
Memory	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB
Storage	Mini PCIe SATA II SSD (Default 64GB) max. 512GB	Mini PCIe SATA II SSD (Default 64GB) max. 512GB	Mini PCIe SATA II SSD (Default 64GB) max. 512GB
Ethernet Controller	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Standard 7
Connectors			
Serial Interface	1 x RS-232	1 x RS-232	1 x RS-232
LAN	1 x LAN	1 x LAN	1 x LAN
USB	2 x USB	2 x USB	2 x USB
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical			
Dimensions	311 x 257 x 46.4 mm	381.8 x 310 x 56.4 mm	457.4 x 370 x 61.9 mm
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
Net Weight	7.1 kg	7.3kg	10.2kg
IP Rating	Full IP67	Full IP67	Full IP67
Mounting	VESA Mount	VESA Mount	VESA Mount
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Consumption	33W (Typ.)	38W (Typ.)	72W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

IP67 Display



Model Name	10.4"	15"	19"
	R10L100-SPT2	R15L100-SPC3	R19L100-SPM1
Display			
Resolution	1024 x 768	1024 x 768	1280 x 1024
Brightness	350 nits	250 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)
Active Area	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88 (H); -88~88(V)	-85~85 (H); -80~80(V)
Display Color	16.2M	16.2M	16.7M
Touch	5 Wire Resistive (Optional), AR Glass (Optional)	5 Wire Resistive (Optional), AR Glass (Optional)	5 Wire Resistive (Optional), AR Glass (Optional)
Connectors			
VGA	1 x VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D (Optional)	1 x DVI-D (Optional)	1 x DVI-D (Optional)
USB	1 x USB for Touch	1 x USB for Touch	1 x USB for Touch
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical			
Dimension	289 x 246 x 49.9 mm	378 x 301 x 56.4 mm	467.4 x 392 x 56.6 mm
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Proof	Full IP67	Full IP67	Full IP67
Mounting	VESA Mount	VESA Mount	VESA Mount
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Consumption	26W (Typ.)	30W (Typ.)	36W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

IP65 Panel PC

Intel® Core™ i5-7200U Kaby Lake



Model Name	15"	17"	19"	21.5" (16:9)
	R15IK3S-SPC3	R17IK3S-SPA1	R19IK3S-SPM1	W22IK3S-SPA3
Display				
Resolution	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	250 nits	350 nits	250 nits	250 nits
Contrast Ratio	700 : 1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-88~88 (H); -88~88(V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.7M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)
System				
Processor	Intel® 7th Generation Core™ i5-7200U 2.5GHz	Intel® 7th Generation Core™ i5-7200U 2.5GHz	Intel® 7th Generation Core™ i5-7200U 2.5GHz	Intel® 7th Generation Core™ i5-7200U 2.5GHz
BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated
Memory	1 x DDR4 2133MHz 4GB (Default), max. 16GB	1 x DDR4 2133MHz 4GB (Default), max. 16GB	1 x DDR4 2133MHz 4GB (Default), max. 16GB	1 x DDR4 2133MHz 4GB (Default), max. 16GB
Storage	2.5" HDD/M.2 SSD (Default 64GB)	2.5" HDD/M.2 SSD (Default 64GB)	2.5" HDD/M.2 SSD (Default 64GB)	2.5" HDD/M.2 SSD (Default 64GB)
Ethernet Controller	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors				
Serial Interface	1 x RS-232	1 x RS-232	1 x RS-232	1 x RS-232
LAN	1 x LAN	1 x LAN	1 x LAN	1 x LAN
USB	2 x USB	2 x USB	2 x USB	2 x USB
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical				
Dimensions	378 x 301 x 56.4 mm	412 x 344 x 61.3 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Rating	Full IP65	Full IP65	Full IP65	Full IP65
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power				
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	52W (Typ.)	56W (Typ.)	56W (Typ.)	66W (Typ.)
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

IP65 Panel PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	10.4"	15"	17"	19"	21.5" (16:9)
	R10IB3S-SPC3	R15IB3S-SPC3	R17IB3S-SPA1	R19IB3S-SPM1	W22IB3S-SPA3
Display					
Resolution	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	350 nits	250 nits	250 nits
Contrast Ratio	1000 : 1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	304.1 (H) x 228.1 (V)	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88(H); -88~88(V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.2M	16.2M	16.7M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)
System					
Processor	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz
BIOS	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash
Chipset	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate	Intel Atom® SoC Integrate
Memory	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB	1 x SODIMM, DDR3L 1600 (Default 4GB) max. 8GB
Storage	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)	2.5" HDD/Mini PCIe SATA II SSD (Default 64GB)
Ethernet Controller	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN	Dual Intel® I210-AT GbE LAN
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7
Connectors					
Serial Interface	1 x RS-232	1 x RS-232	1 x RS-232	1 x RS-232	1 x RS-232
LAN	1 x LAN	1 x LAN	1 x LAN	1 x LAN	1 x LAN
USB	2 x USB	2 x USB	2 x USB	2 x USB	2 x USB
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical					
Dimensions	289 x 246 x 49.9 mm	378 x 301 x 56.4 mm	412 x 344 x 61.3 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Proof	Full IP65	Full IP65	Full IP65	Full IP65	Full IP65
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	33W (Typ.)	38W (Typ.)	43W (Typ.)	45W (Typ.)	56W (Typ.)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

IP65 Panel PC

Intel® Celeron® N2930 Bay Trail-M

Vertical Market Solutions



Model Name	15"	15"	17"	19"	21.5" (16:9)
	R15IB3S-65A1FTP	R15IB3S-65C3	R17IB3S-65A1	R19IB3S-65M1	W22IB3S-65A3
Display					
Resolution	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	400 nits	250 nits	350 nits	250 nits	
Contrast Ratio	700:1 (Typ.)	700 : 1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)
Active Area	304.1 (H)x 228.1 (V)	304.1 (H) x 228.1 (V)	337.9 (H) x 270.4 (V)	376.3(H) x 301.1(V)	476.7 (H) x 268.1 (V)
Viewing Angle	-80~80 (H); -60~80 (V)	-70~70(H); -65~60(V)	-85~85(H); -80~80(V)	-85~85(H); -80~80(V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.297 (H) x 0.297 (V)	0.297 (H) x 0.297 (V)	0.264 (H) x 0.264 (V)	0.294(H) x 0.294(V)	0.248(H) x 0.248(V)
Display Color	16.2M, 8 bits	16.2M	16.7M	16.7M	16.7M
Touch	Projected Capacitive	5 Wires Resistive or AR Glass	5 Wires Resistive or AR Glass	5 Wires Resistive or AR Glass	5 Wires Resistive or AR Glass
System					
Processor	Intel® Celeron® N2930 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz
BIOS	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash
Chipset	Intel Atom® SoC integrated	Intel Atom® SoC integrated	Intel Atom® SoC integrated	Intel Atom® SoC integrated	Intel Atom® SoC integrated
Memory	1x SO-DIMM DDR3L 1066/1333 MHz (Default 4GB, max. 8GB)	1 x SODIMM, DDR3L 1600 (Default 4GB, max. 8GB)	1 x SO-DIMM, DDR3L 1600 (Default 4GB, max. 8GB)	1 x SO-DIMM, DDR3L 1600 (Default 4GB, max. 8GB)	1 x SO-DIMM, DDR3L 1600 (Default 4GB, max. 8GB)
Storage	2.5" HDD/SSD (Default 64GB)	2.5" HDD/ Mini PCIe SSD (Default 64GB)	2.5" HDD/Mini PCIe SSD (Default 64GB)	2.5" HDD/Mini PCIe SSD (Default 64GB)	2.5" HDD/ Mini PCIe SSD (Default 64GB)
SATA	1 x SATA II				
Ethernet Controller	1 x RJ45 10/100/1000 Mbps	1 x RJ45 10/100/1000 Mbps	1 x RJ45 10/100/1000 Mbps	1 x RJ45 10/100/1000 Mbps	1 X RJ45 10/100/1000 Mbps
Audio	Realtek ALC886 HD Audio Codec	Built in ALC886 HD Audio Codec	Built in ALC886 HD Audio Codec	Built in ALC886 HD Audio Codec	Built in ALC886 HD Audio Codec
OS	Windows 10 IoT Enterprise Enterprise Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Standard Windows Embedded 7 Standard
Connectors					
Serial Interface	1 x RS-232 (Optional RS-422/ RS485)	4 x RS-232 (3 x RS-232 internal)	4 x RS-232 (3 x RS-232 internal)	4 x RS-232 (3 x RS-232 internal)	4 x RS-232 (3 x RS-232 internal)
LAN	1 x LAN				
USB	2 x USB Type-A Receptacle	6 x USB2.0 (4 x USB internal)	6 x USB2.0 (4 x USB internal)	6 x USB2.0 (4 x USB internal)	6 x USB2.0 (4 x USB internal)
Mechanical					
Dimensions	396 x 310 x 49 mm	388 x 311 x 61 mm	416 x 350 x 61 mm	460 x 385 x 63 mm	550 x 340 x 65 mm
Operating Temp.	-20°C to 60°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	10% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Rating	Full IP65	Full IP65	Full IP65	Full IP65	Full IP65
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power					
Power Input	+12V DC	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	25W (Typ.) (Max.backlight & high CPU load)	38W (Typ.)- max backlight & high CPU load	43W (Typ.) - max backlight & high CPU load	45W (Typ.) - max backlight & high CPU load	56W (Typ.) - max backlight & high CPU load
Certifications					
Safety	CE, FCC, RoHS	CE, FCC, RoHS	CE, FCC, RoHS	CE, FCC, RoHS	CE, FCC, RoHS

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

IP65 Panel PC

Intel® Core™ i5-7200U Kaby Lake



Model Name	15"	17"	19"	21.5" (16:9)
	R15IK3S-65C3	R17IK3S-65A1	R19IK3S-65M1	W22IK3S-65A3
Display				
Resolution	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	250 nits	350 nits	250 nits	250 nits
Contrast Ratio	700:1(Typ.)	1000:1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	337.92 (H) x 270.34 (V)	376.32 (H)x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-80~80 (H); -70~70 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.297 (H) x 0.297 (V)	0.264 (H) x 0.264 (V)	0.294 (H) x 0.294 (V)	0.248 (H) x 0.248 (V)
Display Color	16.2M colors (8 bits)	16.7M (6 bits + FRC)	16.7M	16.7M
Touch	5 Wires Resistive (Optional)	5 Wires Resistive (Optional)	5 Wires Resistive (Optional)	5 Wires Resistive (Optional)
System				
Processor	Intel® 5th Gen. Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)	Intel® 5th Gen. Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)	Intel® 5th Gen. Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)	Intel® 5th Gen. Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)
BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated
Memory	DDR4-2133 SO-DIMM (Max 16GB)	DDR4-2133 SO-DIMM (Max 16GB)	DDR4-2133 SO-DIMM (Max 16GB)	DDR4-2133 SO-DIMM (Max 16GB)
Storage	64GB M.2 B Key SATA III (Options up to 256GB)	64GB M.2 B Key SATA III (Options up to 256GB)	64GB M.2 B Key SATA III (Options up to 256GB)	64GB M.2 B Key SATA III (Options up to 256GB)
Ethernet Controller	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM	Intel® Gigabit-LAN Controller I211AT + PHY I219LM
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors				
Serial Interface	1 x RS-232	1 x RS-232	1 x RS-232	1 x RS-232
USB	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0
Mechanical				
Dimensions	384 x 311 x 61 mm	416 x 350 x 61 mm	460 x 385 x 63 mm	550 x 340 x 65 mm
Operating Temp.	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Rating	Full IP65	Full IP65	Full IP65	Full IP65
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount
Power				
Power Input	+12V DC	+12V DC	+12V DC	+12V DC
Power Consumption	52W (Typ.)- max backlight & high CPU load	56W (Typ.)- max backlight & high CPU load	56W (Typ.)- max backlight & high CPU load	66W (Typ.)- max backlight & high CPU load
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC,	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

IP65 Display



Model Name	10.4"	15"
	R10L100-SPT2	R15L100-SPC3
Display		
Resolution	1024 x 768	1024 x 768
Brightness	350 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	700 : 1 (Typ.)
Active Area	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88 (H); -88~88 (V)
Display Color	16.2M	16.2M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)
Connectors		
VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D (Optional)	1 x DVI-D (Optional)
USB	1 x USB for Touch	1 x USB for Touch
Power	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical		
Dimension	289 x 246 x 49.9 mm	378 x 301 x 56.4 mm
Operating Temp.	-10°C to 55°C	-10°C to 55°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Rating	Full IP65	Full IP65
Mounting	VESA Mount	VESA Mount
Power		
Power Input	+12V DC (Lockable Power Jack)	+12V DC (Lockable Power Jack)
Power Consumption	26W (Typ.)	30W (Typ.)
Certifications		
Safety	CE, FCC	CE, FCC

IP65 Display



Model Name	17"	19"	21.5" (16:9)
	R17L100-SPA1	R19L100-SPM1	W22L100-SPA3
Display			
Resolution	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	350 nits	250 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	476.64 (H) x 268.11 (V)
Viewing Angle	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80(V)	-89~89 (H); -89~89 (V)
Display Color	16.7M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)	Projected Capacitive Multitouch (Default), Glass (Optional)
Connectors			
VGA	1 x VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D (Optional)	1 x DVI-D (Optional)	1 x DVI-D (Optional)
USB	1 x USB for Touch	1 x USB for Touch	1 x USB for Touch
Power	1 x Lockable Power Jack	1 x Lockable Power Jack	1 x Lockable Power Jack
Mechanical			
Dimension	412 x 344 x 61.3 mm	467.4 x 392 x 56.6 mm	541 x 337 x 53 mm
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)	30% to 90% (Non-condensing, RH)
IP Rating	Full IP65	Full IP65	Full IP65
Mounting	VESA Mount	VESA Mount	VESA Mount
Power			
Power Input	+12V DC (Lockable Power Jack)	+12V DC (Lockable Power Jack)	+12V DC (Lockable Power Jack)
Power Consumption	31W (Typ.)	36W (Typ.)	50W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Heavy Duty

Overview

Vehicles such as dump trucks, cranes, excavators and tractors usually operate in heavy industries or agricultural sectors and require rugged computing solutions that must be tough and durable enough to withstand the harshest environments. These computers must be designed and reinforced to be rugged enough to handle the shock and vibrations of the vehicles.

Winmate provides a full range of panel computers and displays that withstand shock and vibration following MIL-STD-810F/G standard and feature at minimum IP65 rating for water and dust protection to ensure reliability in even the toughest conditions.

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical



Heavy Duty

Technology

Ruggedness

Ruggedness requirements for a panel PC are different from those for a mobile tablet or notebook computer. The ever-important drop spec is almost meaningless in a fix-mount panel. Shock, however, can occur, as can vibration.

Winmate products for heavy duty applications comply with the following requirements:

- MIL-STD-810F 516.5 Procedure I : 40 G for 11ms Sawtooth Pulse Test
- MIL-STD-810F 514.5 Vibration Test
- Wide Operating Temperature range from as low as -25° to 60°C

Overall construction of Winmate's heavy duty computers is inherently rugged. The aluminum die-cast housing is rock-solid and special anti-corrosion treatment means it'll hold up even in exposed settings. Surface treatment is a very resistive black powder coating. Optical bonding with anti-moisture treatment is standard, and there's a protective glass option available.

IP65 Protection

What do the ratings mean? The "6" means both versions are totally protected against dust. It's the highest solids rating a device can get. The second number indicates protection against liquids. A "5" means the device is protected against water sprayed from all direction, with limited ingress permitted. That's generally good enough if a computer is just occasionally subjected to rain or splashing.



Waterproof Connectors

Special waterproof M12 type of connectors with screw-on caps to provide even better water and dust protection.

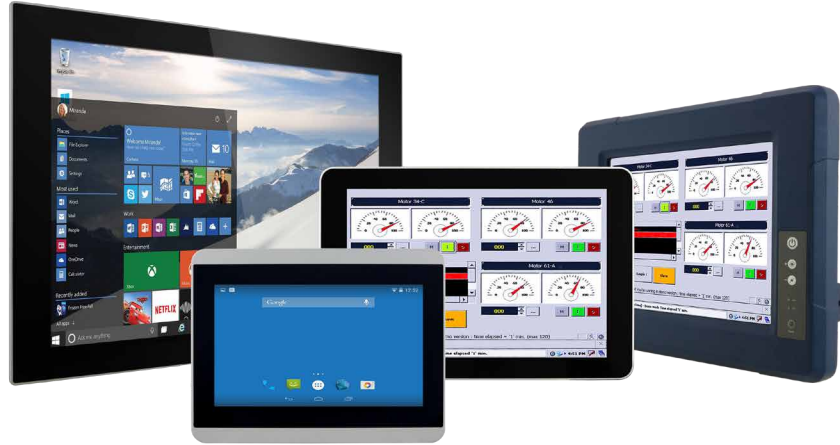
Heavy Duty Panel PC & Display

G-WIN Series

Optional Configuration



Wide Power



Application



Firefighter Truck

“DURABLE IN-VEHICLE
COMPUTER.”

Winmate 15-inch panel
PC was installed inside a
firefighter truck for navigation
purposes.

“**TOUGH. RUGGED.
HEAVY DUTY.**”

- Waterproof GS Series Panel PC & Display
- Front IP65 GC Series Panel PC & Display
- Vehicle Mount Panel PC & Display
- Full IP67 Panel PC & Display



Tested MIL-STD 810-G, MIL-STD 461-F

Mounting solution for vehicle applications

Power ignition control

IP65/IP67 water and dust proof

Wide Operating Temperature

Accessories

RS-232 Cable

VGA Cable

USB Cable

Power Cable

Driver CD

G-WIN Front IP65 Panel PC

Intel® Core™ i5-7200U Kaby Lake



Model Name	12.1"	15"
	R12IK3S-GCM2(HB)	R15IK3S-GCC3(HB)
Display		
Resolution	1024 x 768	1024 x 768
Brightness	500 nits (Optional 1000 nits)	250 nits (Optional 1000 nits)
Contrast Ratio	700:1 (Typ.)	700:1 (Typ.)
Viewing Angle	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)
Display Color	16.2M	16.2M
System		
Processor	Intel® Core™ i5-7200U Kaby Lake 2.5 GHz	Intel® Core™ i5-7200U Kaby Lake 2.5 GHz
System Memory	2GB DDR4-2133 SODIMM	2GB DDR4-2133 SODIMM
Storage	64GB M.2 SSD	64GB M.2 SSD
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors		
USB Port	2 x USB3.0	2 x USB3.0
Ethernet	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)
COM Port	1 x RS-232/422/485 (Default RS-232)	1 x RS-232/422/485 (Default RS-232)
HDMI	1 x HDMI 1.4a	1 x HDMI 1.4a
Audio		
Speaker	1 x 2 Watt Speaker	1 x 2 Watt Speaker
Mechanical		
Dimensions	296.2 x 226.7 x 45.5 mm	254.2 x 198 x 36.4 mm
Cooling System	Fanless design	Fanless design
Mounting	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 75 x 75 mm, Panel Mount
Operating Temp.	-15°C to 55°C	-15°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Power		
Power Input	+12V DC (Optional +9-36V DC)	+12V DC (Optional +9-36V DC)
Certifications		
Safety	CE, FCC	EC, FCC

Vertical Market Solutions

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

G-WIN Front IP65 Panel PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	7" (17:10) W07IB3S-GCO1	10.1" (17:10) W10IB3S-GCH1(HB)	10.4" R10IB3S-GCT2(HB)	12.1" R12IB3S-GCM2(HB)	15" R15IB3S-GCC3(HB)
Display					
Resolution	1024 x 600	1024 x 600	1024 x 768	1024 x 768	1024 x 768
Brightness	1000 nits	450 nits (Optional 800 nits)	350 nits (Optional 1000 nits)	500 nits (Optional 1000 nits)	250 nits (Optional 1000 nits)
Contrast Ratio	700:1 (Typ.)	800:1 (Typ.)	350:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Active Area	153.6 (W) x 90.0 (H)	222.72 (W) x 125.28 (H)	210.4 (W) x 157.8 (H)	245.76 (W) x 184.32 (H)	304.1 (W) x 228.1 (H)
Viewing Angle	-75~75 (H); -75~70 (V)	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)
Display Color	16.2M	16.7M	16.2M	16.2M	16.2M
System					
Processor	Intel® Celeron® N2930 1.83GHz	Intel® Celeron® N2930 1.83GHz	Intel® Celeron® N2930 1.83GHz	Intel® Celeron® N2930 1.83GHz	Intel® Celeron® N2930 1.83GHz
System Memory	2GB DDR3L-1600 SODIMM max 8GB	2GB DDR3L-1600 SODIMM max 8GB	2GB DDR3L-1600 SODIMM max 8GB	2GB DDR3L-1600 SODIMM max 8GB	2GB DDR3L-1600 SODIMM max 8GB
Storage	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7
Connectors					
USB Port	1 x USB3.0, 1 x USB2.0	1 x USB3.0, 1 x USB2.0	1 x USB3.0, 1 x USB2.0	1 x USB3.0, 1 x USB2.0	1 x USB3.0, 1 x USB2.0
Ethernet	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)	2 x RJ45 10/100/1000 Mbps (LAN)
COM Port	1 x RS-232/422/485 (Default RS-232)	1 x RS-232/422/485 (Default RS-232)	1 x RS-232/422/485 (Default RS-232)	1 x RS-232/422/485 (Default RS-232)	1 x RS-232/422/485 (Default RS-232)
HDMI	1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI
Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 2 Watt Speaker	1 x 2 Watt Speaker
Mechanical					
Dimensions	189.4 x 145.4 x 37.7 mm	263.28 x 172 x 40.2 mm	252.4 x 198 x 36.4 mm	296.2 x 226.7 x 45.5 mm	296.2 x 226.7 x 45.5 mm
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design	Fanless design
Mounting	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 100 x 100, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount
Power					
Power Input	+12V DC	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

G-WIN Front IP65 Panel PC

FreescallTM Arm[®] Cortex[®]-A9 i.MX6 Dual-core



Model Name	7" (17:10) W07FA3S-GCO1	10.1" (17:10) W10FA3S-GCH1(HB)	10.4" R10FA3S-GCT2(HB)	12.1" R12FA3S-GCM2(HB)	15" R15FA3S-GCC3(HB)
Display					
Resolution	1024 x 600	1024 x 600	1024 x 768	1024 x 768	1024 x 768
Brightness	1000 nits	450 nits (Optional 800 nits)	350 nits (Optional 1000 nits)	500 nits (Optional 1000 nits)	250 nits (Optional 1000 nits)
Contrast Ratio	700:1 (Typ.)	800:1 (Typ.)	350:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Active Area	153.6 (W) x 90.0 (H)	222.72 (W) x 125.28 (H)	210.4 (W) x 157.8 (H)	245.76 (W) x 184.32 (H)	210.4 (W) x 157.8(H)
Viewing Angle	-75~75 (H); -75~70 (V)	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)
Display Color	16.7M	16.7M	16.2M	16.2M	16.2M
System					
Processor	Freescall TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core	Freescall TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core	Freescall TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core	Freescall TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core	Freescall TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core
System Memory	1GB LPDDR3 Optional 2GB	1GB LPDDR3 Optional 2GB	1GB LPDDR3 Optional 2GB	1GB LPDDR3 Optional 2GB	1GB LPDDR3 Optional 2GB
Storage	Onboard 16GB eMMC (Default)/ Micro SD Card	Onboard 16GB eMMC (Default)/ Micro SD Card	Onboard 16GB eMMC (Default)/ Micro SD Card	Onboard 16GB eMMC (Default)/ Micro SD Card	Onboard 16GB eMMC (Default)/ Micro SD Card
OS	Android 6.0	Android 6.0	Android 6.0	Android 6.0	Android 6.0
Connectors					
USB Port	1 x USB2.0, 1 x USB OTG, 1 x Console (For Linux)	1 x USB2.0, 1 x USB OTG, 1 x Console (For Linux)	1 x USB2.0, 1 x USB OTG, 1 x Console (For Linux)	1 x USB2.0, 1 x USB OTG, 1 x Console (For Linux)	1 x USB2.0, 1 x USB OTG, 1 x Console (For Linux)
Ethernet	1 x RJ45 10/100/1000 Mbps (LAN)	1 x RJ45 10/100/1000 Mbps (LAN)	1 x RJ45 10/100/1000 Mbps (LAN)	1 x RJ45 10/100/1000 Mbps (LAN)	1 x RJ45 10/100/1000 Mbps (LAN)
COM Port	2 x RS-232/422/485	2 x RS-232/422/485	2 x RS-232/422/485	2 x RS-232/422/485	2 x RS-232/422/485
SD Slot	1 x Micro SD Card Reader	1 x Micro SD Card Reader	1 x Micro SD Card Reader	1 x Micro SD Card Reader	1 x Micro SD Card Reader
Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 2 Watt Speaker	1 x 2 Watt Speaker
Mechanical					
Dimensions	189.4 x 145.4 x 37.7 mm	189.4 x 145.4 x 37.7 mm	189.4 x 145.4 x 37.7 mm	189.4 x 145.4 x 37.7 mm	189.4 x 145.4 x 37.7 mm
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design	Fanless design
Mounting	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount
Power					
Power Input	+9~24V DC	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy
Duty

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Marine

Military

Medical

G-WIN Front IP65 Display



Model Name	7" (17:10) W07L100-GCO1	10.1" (17:10) W10L100-GCH1(HB)	10.4" R10L100-GCT2(HB)	12.1" R12L100-GCM2(HB)	15" R15L600-GCC3(HB)
Display					
Resolution	1024 x 600	1024 x 600	1024 x 768	1024 x 768	1024 x 768
Brightness	1000 nits	450 nits optional for high brightness 800 nits	350 nits optional for high brightness up to 1000 nits	500 nits optional for high brightness 1000 nits	250 nits optional for High Brightness 1000 nits
Contrast Ratio	700:1 (Typ.)	800:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Viewing Angle	-75~75 (H); -75~70 (V)	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)
Display Color	16.7M	16.7M	16.2M (6bits+FRC)	16.7M (6 bits+FRC)	16.2M (6bits+FRC)
Touch	Projected Capacitive Multitouch	Projected Capacitive Multitouch	Projected Capacitive Multitouch	Projected Capacitive Multitouch	Projected Capacitive Multitouch
Touch interface	USB	USB	USB	USB	USB
I/O Specification					
Connectors	1 x 12V DC 1 x VGA 1 x HDMI 1 x Touch (USB)	1 x 12V DC 1 x VGA 1 x HDMI 1 x USB (Touch)	1 x 12V DC 1 x VGA 1 x HDMI 1 x USB (Touch)	1 x 12V DC 1 x VGA 1 x HDMI 1 x USB (Touch)	1 x 12V DC 1 x VGA 1 x HDMI 1 x USB (Touch)
Mechanical					
Dimensions	263.28 x 171 x 35.7 mm	263.28 x 171 x 35.7 mm	252.4 x 198 x 36.4 mm	296.2 x 226.7 x 45.5 mm	363.4 x 227.96 x 45.2 mm
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Mounting	RAM Mount, Panel Mount, optional VESA 75 x 75 mm	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 100 x 100 mm, Panel Mount
Power					
Power Source	+12V DC	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)	+12V DC (Optional +9~36V DC)
Power Consumption	7W (Typ.)	7W (Typ.)	15W (Typ.)	18W (Typ.)	15W(Typ.)
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

G-WIN Full IP65 Panel PC

FreescalTM ARM[®] Cortex[®]-A9 i.MX6 Dual-core



Model Name	7" (17:10) W07FA3S-GSO1	10.1" (17:10) W10FA3S-GSH1(HB)	10.4" R10FA3S-GST2(HB)	12.1" R12FA3S-GSM2(HB)	15" R15FA3S-GSC3(HB)
Display					
Resolution	1024 x 600	1024 x 600	1024 x 768	1024 x 768	1024 x 768
Brightness	1000 nits	450 nits (Optional 800 nits)	350 nits (Optional 1000 nits)	500 nits optional for high brightness 1000 nits	250 nits optional for high brightness 1000 nits
Contrast Ratio	700:1 (Typ.)	800:1 (Typ.)	1000:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Active Area	153.6 (W) x 90.0 (H)	222.72(H)x125.28(V)	210.4 (W) x 157.8 (H)	220.41 (H)x129.15(V)	304.1(H) x 228.1(V)
Viewing Angle	-75~75 (H); -75~70 (V)	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)
Display Color	16.7M	16.7M	16.2M	16.2M	16.2M
System					
Processor	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1 GHz (Optional Quad-core)	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1 GHz (Optional Quad-core)	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1 GHz (Optional Quad-core)	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1 GHz (Optional Quad-core)	Freescal TM Arm [®] Cortex [®] -A9 i.MX6 Dual-core 1GHz (Optional Quad-core)
System Memory	1GB LPDDR3 (Optional 2 GB)	1GB LPDDR3 (Optional 2GB)	1GB LPDDR3 (Optional 2GB)	1GB LPDDR3 (Optional 2GB)	1GB LPDDR3 (Optional 2GB)
Storage	Onboard 16GB eMMC (Default)	Onboard 16GB eMMC (Default)	Onboard 16GB eMMC (Default)/ Micro SD Card	Onboard 16GB eMMC (Default)	Onboard 16GB eMMC (Default)
OS	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)	Android 6.0 (Default) Linux Kernel 4.1.15, QT 5.5 Browser (Optional) Ubuntu 16.04 (Optional)
Connectors					
USB	1 X USB 2.0 (M12 Type) 1 x USB OTG (On side)	1 x USB 2.0 (M12 Type) 1 x USB OTG (On side)	1 x USB2.0, 1 x USB OTG, 1 x Console (For Linux)	1 x USB 2.0 (M12 Type) 1 x USB OTG (On side)	1 x USB 2.0 (M12 Type) 1 x USB OTG (On Bottom)
Ethernet	1 x 10/100/1000 LAN (M12 type)	1 x 10/100/1000 LAN (M12 Type)	1 x RJ45-10/100/1000 Mbps (LAN)	1 x 10/100/1000 LAN (M12 Type)	1 x 10/100/1000 LAN (M12 Type)
COM	1 x RS-232 (M12 type) (Optional 422/485)	1 x RS-232 (M12 Type) (Optional 422/485)	2 x RS-232/422/485	1 x RS-232 (M12 Type) (Optional 422/485)	1 x RS-232(M12 Type) (Optional 422/485)
SD Slot	1 x Micro SD Card Reader	1 x Micro SD Card Reader	1 x Micro SD Card Reader	1 x Micro SD Card Reader	1 x Micro SD Card Reader
Power	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)
Audio					
Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker
Mechanical					
Dimensions	189.4 x 145.4 x 36.1 mm	263.28 x 171 x 35.7 mm	189.4 x 145.4 x 37.7 mm	226.7 x 296.2 x 45.5 mm	363.4 x 277.8 x 45.2 mm
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design	Fanless design
Mounting	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 75 x 75 mm, Panel Mount	VESA Mount, 100 x 100 mm, Panel Mount
Operating Temp	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Power					
Power Input	+9-24V DC	+12V DC	+12V DC	+12V DC	+12V DC
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy
Duty

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Marine

Military

Medical

G-WIN Full IP65 Panel PC

Intel® Celeron® N2930 Bay Trail-M



Vertical Market Solutions

Model Name	10.1" (17:10)	10.4"	12.1"	15"
	W10IB3S-GSH1(HB)	R10IB3S-GST2(HB)	R12IB3S-GSM2(HB)	R15IB3S-GSC3(HB)
Display				
Resolution	1024 x 600	1024 x 768	1024 x 768	1024 x 768
Brightness	450 nits (Optional 800 nits)	350 nits (Optional 1000 nits)	500 nits optional for high brightness 1000 nits	250 nits optional for high brightness 1000 nits
Contrast Ratio	500:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Active Area	222.72 (H) x 125.28 (V)	210.4 (H) x 157.8 (V)	220.416 (H) x 129.15 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)	-88~88 (H); -88~88 (V)
Display Color	16.7M	16.2M	16.2M	16.2M
System				
Processor	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz	Intel® Celeron® N2930 Bay Trail-M 1.83GHz
System Memory	2GB DDR3L 1600 SODIMM (Max. 8GB)	2GB DDR3L 1600 SODIMM (Max. 8GB)	2GB DDR3L 1600 SODIMM (Max. 8GB)	2GB DDR3L 1600 SODIMM (Max. 8GB)
Storage	64GB mSATA SSD	64GB mSATA SSD	64GB mSATA SSD	mSATA SSD 64GB
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded Standard 7
Connectors				
USB	1 x USB 2.0 (M12 Type)	1 x USB 2.0 (M12 Type)	1 x USB 2.0 (M12 Type)	1 x USB 2.0 (M12 Type)
Ethernet	1 x 10/100/1000 LAN (M12 Type)	1 x 10/100/1000 LAN (M12 Type)	1 x LAN (M12 Type)	1 x 10/100/1000 LAN (M12 Type)
COM	1 x RS-232 (M12 Type) (Optional 422/485)	1 x RS-232 (M12 Type) (Optional 422/485)	1 x RS-232 (M12 Type) (Optional 422/485)	1 x RS-232 (M12 Type) (Optional 422/485)
Power	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)
Audio				
Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker	1 x 1 Watt Speaker
Mechanical				
Dimensions	263.28 x 172 x 35.7 mm	252.4 x 198 x 36.4 mm	296.2 x 226.7 x 45.5 mm	363.40 x 277.86 x 45.2 mm
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design
Mounting	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount	VESA Mount 75 x 75, Panel Mount
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Power				
Power Input	+9~36V DC	+9~36V DC	+9~36V DC	+9~36V DC
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

G-WIN Full IP65 Display



Model Name	7" (17:10)	10.1" (17:10)	10.4"	12.1"	15"
	W07L100-GSO1	W10L100-GSH1(HB)	R10L100-GST2(HB)	R12L100-GSM2(HB)	R15L600-GSC3(HB)
Display					
Resolution	1024 x 600	1024 x 600	1024 x 768	1024 x 768	1024 x 768
Brightness	1000 nits	450 nits optional for high brightness 800 nits	350 nits optional High brightness 1000 nits	500 nits optional for high brightness 1000 nits	250 nits optional for high brightness 1000 nits
Contrast Ratio	700:1 (Typ.)	800:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Active Area	153.6 (H) x 90 (V)	222.72 (H) x 125.28 (V)	210.4 (H) x 157.8 (V)	245.76 (H) x 184.32 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-75~75 (H); -75~70 (V)	-75~80 (H); -80~80 (V)	-88~88 (H); -88~88 (V)	-85~85 (H); -85~85 (V)	-88~88 (H); -88~88 (V)
Connectors					
VGA	1 x VGA	1 x VGA	1 x VGA	1 x VGA	1 x VGA
USB	1 x USB for touch	1 x USB for touch	1 x USB for touch	1 x USB for touch	1 x USB for touch
Power	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)	1 x Power Jack (M12 Type)
Mechanical					
Dimensions	189.4 x 145.4 x 39.8 mm	263.3 x 172 x 40.2 mm	252.4 x 198 x 36.4 mm	296.2 x 226.7 x 45.5 mm	363.4 x 227.9 x 45.2 mm
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Mounting	VESA Mounting	VESA Mount, 75 x 75 mm	VESA Mount, 100 x 100 mm	VESA Mount, 75 x 75 mm	VESA Mount, 100 x 100 mm
Power					
Power Source	+12V DC	+9~36V DC	+9~36V DC	+9~36V DC	+9~36V DC
Power Consumption	10 W (Typ.)	15W (Typ.)	15W (Typ.)	18 W (Typ.)	20 W (Typ.)
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

Stainless

Heavy
Duty

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Marine

Military

Medical

G-WIN Vehicle Mount Computer

Intel® Core™ i5-7200U Kaby Lake



Vertical Market Solutions

Model Name	10.4"	15"	19"
	R10IK3S-VMT2	R15IK3S-VMC3(HB)	R19IK3S-VMFTP(HB)
Display			
Resolution	1024 x 768	1024 x 768	1280 x 1024
Brightness	350 nits	250 nits (Optional for 1000 nits)	400 nits (Optional for HB 1000 nits)
Contrast Ratio	1000 :1 (Typ.)	700:1 (Typ.)	1000 : 1 (Typ.)
Active Area	201.4 (H) x 157.8 (V)	304.128 (H) x 228.096 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M (6 bits+FRC)	16.2M, 8 bits	16.7M, 8 bits
System			
Processor	Intel® Core™ i5-7200U, 2.56GHz	Intel® Core™ i5-7200U, 2.56GHz	Intel® Core™ i5-7200U, 2.56GHz
BIOS	Insyde BIOS	Insyde BIOS	Insyde BIOS
Memory	1 x DDR4 2133 MHz SO-DIMM (Default 4GB, max. 16GB)	1 x DDR4 2133 MHz SO-DIMM (Default 4GB, max. 16GB)	1 x DDR4 2133 MHz SO-DIMM (Default 4GB, max. 16GB)
Storage	M.2 SSD (Default 64GB, max.512GB)	M.2 SSD (Default 64GB, max.512GB)	M.2 SSD (Default 64GB, max.512GB)
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors			
Serial Interface	1 x RS-232 (Select by BIOS) , 1 x RS-232/422/485	1 x RS-232 , 1 x RS-232 (Optional) 1 x RS-232/422/485	1 x IP65 RS-232/422/485
USB	2 x USB 3.0	2 x USB 3.0	1 x IP65 USB 2.0 A Type with cover 1 x IP65 USB 2.0 Connector
LAN	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	1 x IP65 LAN with RJ45 Connector
Power	1 x DC-in Jack (Phoenix type)	1 x Terminal Block	1 x IP65 +9~36V DC
HDMI	1 x HDMI	1 x HDMI	-
CANBus	-	1 x CANBus (Optional)	-
Digital I/O	-	1 x Digital I/O (Optional)	-
Antenna	WLAN antenna SMA in top (Optional)		-
Power			
Power Input	+9~36V DC with Isolation(Phoenix type) Optional +6~60V DC, with Ignition On/Off delay	+9~36V DC (Phoenix type) with Isolation Optional +6~60V DC, with Ignition On/Off delay	+9~36V DC (Isolation)
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

G-WIN Vehicle Mount Computer

Intel® Celeron® N2930 Bay Trail-M



Model Name	8.4"	10.4"	10.4"	10.4"
	R08IB3S-VMU1	R10IB3S-VMP1	R10IB3S-VMP3	R10IB3S-VMT2
Display				
Resolution	800 x 600	800 x 600	640 x 480	1024 x 768
Brightness	600 nits	600 nits	400 nits	350 nits
Contrast Ratio	600:1 (Typ.)	400:1 (Typ.)	700:1 (Typ.)	1000:1 (Typ.)
Active Area	170.4 (H) x 127.8 (V)	211.2 (H) x 158.4 (V)	211.2 (H) x 158.4 (V)	201.4 (H) x 157.8 (V)
Viewing Angle	-75~75 (H); -70~60 (V)	-70~70 (H); -70~60 (V)	-80~80 (H); -60~80 (V)	-88~88 (H); -88~88 (V)
Display Color	262,144 (6 bits/color)	16.2M (8 bits/color)	16.2M (8 bits/color)	16.2M (6 bits+FRC)
System				
Processor	Intel® N2930 Bay Trail 1.83GHz	Intel® N2930 Bay Trail 1.83GHz	Intel® N2930 Bay Trail 1.83GHz	Intel® N2930 Bay Trail 1.83GHz
BIOS	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash	AMI 16Mbit Flash
Memory	1 x DDR3L 1600 MHz SO-DIMM max. 8GB	1 x DDR3L 1600 MHz SO-DIMM max. 8GB	1 x DDR3L 1600 MHz SO-DIMM max. 8GB	1 x DDR3L 1600 MHz SO-DIMM max. 8GB
Ethernet	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN	Intel® I210-AT GbE LAN
Storage	mSATA SSD default 64G max. 512GB	mSATA SSD default 64G max. 512GB	mSATA SSD default 64G max. 512GB	mSATA SSD default 64G max. 512GB
Expansion Slot	1 x Mini PCIe slot (For wireless module) 1 x Mini PCIe slot (For SATA SSD)	1 x Mini PCIe slot (For wireless module) 1 x Mini PCIe slot (For SATA SSD)	1 x Mini PCIe slot (For wireless module) 1 x Mini PCIe slot (For SATA SSD)	1 x Mini PCIe slot (For wireless module) 1 x Mini PCIe slot (For SATA SSD)
OS	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded
Connectors				
Serial Interface	1 x RS-232/422/485 1 x RS-232	1 x RS-232/422/485 1 x RS-232	1 x RS-232/422/485 1 x RS-232	1 x RS-232/422/485 1 x RS-232
USB	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
LAN	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)
Power	1 x DC-in Jack (Phoenix type)	1 x DC-in Jack (Phoenix type)	1 x DC-in Jack (Phoenix type)	1 x DC-in Jack (Phoenix type)
HDMI	1 x HDMI	1 x HDMI	1 x HDMI	1 x HDMI
Antenna	1 x WLAN antenna SMA on top (Optional)	1 x WLAN antenna SMA on top (Optional)	1 x WLAN antenna SMA on top (Optional)	1 x WLAN antenna SMA on top (Optional)
Power				
Power Input	+9~36V DC (Phoenix type) Optional +6-60V DC, with Ignition On/Off delay	+9~36V DC (Phoenix type) Optional +6-60V DC, with Ignition On/Off delay	+9~36V DC (Phoenix type) Optional +6-60V DC, with Ignition On/Off delay	+9~36V DC (Phoenix type) Optional +6-60V DC, with Ignition On/Off delay
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Vertical Market Solutions

Product

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Military

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G-WIN Vehicle Mount Computer

Intel® Celeron® N2930 Bay Trail-M



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Model Name	12.1" (16:10) W12IB3S-VMM9	15" R15IB3S-VMC3(HB)
Display		
Resolution	1280 x 800	1024 x 768
Brightness	400 nits	250 nits (Optional for HB 1000 nits)
Contrast Ratio	1000:1 (Typ.)	700:1 (Typ.)
Active Area	261.12 (H) x 163.2 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-88~88 (H); -88~88 (V)
Display Color	262.144 (6 bits/color)	16.2M, 8 bits
System		
Processor	Intel® N2930 Bay Trail 1.83GHz	Intel® N2930 Bay Trail 1.83GHz
BIOS	AMI 16Mbit Flash	Award 16Mbit Flash
Memory	1 x DDR3L 1600 MHz SO-DIMM Max. 8GB	1 x DDR3L 1600 MHz SO-DIMM Max. 8GB
Storage	mSATA SSD default 64GB (Max. 512GB)	mSATA SSD default 64GB (Max. 512GB)
OS	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded
Connectors		
Serial Interface	1 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232 (Optional), 1 x RS-232/422/485
USB	1 x USB 3.0, 1 x USB 2.0	1 x USB 3.0, 1 x USB 2.0
LAN	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)
Power	1 x Terminal Block	1 x Terminal Block
HDMI	1 x HDMI	1 x HDMI
CANBus	-	1 x CANBus (Optional)
Digital I/O	-	1 x Digital I/O (Optional)
Antenna	1 x WLAN or 4G Antenna in top (Optional)	
Power		
Power Input	+9~36V DC (Phoenix type) Optional +6-60V DC, with Ignition On/Off delay	+9~36V DC (Phoenix type) Optional +6-60V DC, with Ignition On/Off delay
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications		
Safety	CE, FCC	CE, FCC

G-WIN Vehicle Mount Display



Model Name	8.4" (17:10) R08T200-VMU1	10.4" R10L100-VMT2	12" (16:10) W12L100-VMM9
Display			
Resolution	800 x 600	1024 x 768	1280 x 800
Brightness	600 nits	350 nits	400 nits
contrast Ratio	600:1 (Typ.)	1200:1 (Typ.)	1000:1 (Typ.)
Active Area	170.4 (H) x 127.8 (V)	211.2 (H) x 158.4 (V)	261.12 (H) x 163.2 (V)
Viewing Angle	-75~75 (H); -70~60 (V)	-88~88 (H); -88~88 (V)	-88~88 (H); -88~88 (V)
Pixel Pitch	0.213 (H) x 0.213 (V)	0.33 (H) x 0.33 (V)	0.204 (H) x 0.204 (V)
Display Color	16.2M	16.2M	262K
I/O Specification			
VGA	1 x VGA (DB-15)	1 x VGA (DB-15) 1 x +9~36V DC terminal block (Phoenix type) 1 x RS-232 or USB for Touch Screen (Optional w/touch)	1 x VGA (DB-15) 1 x +9~36V DC terminal block (Phoenix type) 1 x RS-232 or USB for Touch Screen (Optional w/touch)
Power	1 x Terminal block (Phoenix type)	1 x Terminal block (Phoenix type)	1 x Terminal block (Phoenix type)
Serial Interface	1x RS-232 or USB for Touch Screen (Optional w/touch)	1x RS-232 or USB for Touch Screen (Optional w/touch)	1x RS-232 or USB for Touch Screen (Optional w/touch)
User Controls			
Control Buttons	Menu/Enter Button Auto-adjust/Esc Button Brightness Up/Increase Button Brightness Down/Decrease Button Display Power Button	Menu/Enter Button Auto-adjust/Esc Button Brightness Up/Increase Button Brightness Down/Decrease Button Display Power Button	Menu/Enter Button Auto-adjust/Esc Button Brightness Up/Increase Button Brightness Down/Decrease Button Display Power Button
Led Indicator	Power, Sleep	Power, Sleep	Power, Sleep
Mechanical			
Dimensions	277 x 219.5 x 59.7 mm	315 x 250.9 x 67 mm	310 x 215 x 48 mm
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Shock	Operating: 30g for 18ms, 300m/s ²	Operating: 30g for 18ms, 300m/s ²	Operating: 30g for 18ms, 300m/s ²
Vibration	Operating: 1.60/1.96/2.18 g rms for XYZ/5-500Hz	Operating: 1.60/1.96/2.18 g rms for XYZ/5-500Hz	Operating: 1.60/1.96/2.18 g rms for XYZ/5-500Hz
Power Input	+9~36V DC	+9~36V DC	+9~36V DC
Power Consumption	15W (Typ.)	26W (Typ.)	22W (Typ.)
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Options			
Mounting Bracket	One robust bracket with locking handle (Can adjust from -5° to 90°)	One robust bracket with locking handle (Can adjust from -5° to 90°)	One robust bracket with locking handle (Can adjust from -5° to 90°)
Transflective Film	Transflective film enhancement	Transflective film enhancement	Transflective film enhancement
Certifications			
Safety	CE, FCC, IEC60068-2-27	CE, FCC, IEC60068-2-27	CE, FCC, IEC60068-2-27

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G-WIN Vehicle Mount Display



Model Name	15" (IP67)	19" (IP67)
	R15L100-VMC3HB	R19L100-67FTP
Display		
Resolution	1024 x 768	1280 x 1024
Brightness	1000 nits	400 nits/1000 for Optional High Brightness with Optical Bonding
Contrast Ratio	700:1 (Typ.)	1000 : 1 (Typ.)
Active Area	304.128 (H) x 228.096 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M, 8-bits	16.7M
Touch	Projected Capacitive Multitouch	Projected Capacitive Multitouch
Connectors		
VGA	1 x VGA (DB-15)	1 x VGA (IP67 Grade)
Power	1 x Terminal block	1 x Power Jack (IP67 Grade)
Serial Interface	1 x RS-232 or USB for Touch (Optional)	1 x RS-232 Remote Control (IP67 Grade, Optional)
HDMI	-	1 x HDMI (IP67 Grade, Optional)
USB	USB for Touch (Optional)	1 x USB for Touch (IP67 Grade, Optional)
User Controls		
Control Buttons	Menu/Auto-adjust/SWAP/PIP Button Brightness Up/Increase Button Brightness Down/ Decrease Button LED Button Brightness Display Power Button	Menu/Auto-adjust/SWAP/PIP Button Brightness Up/Increase Button Brightness Down/ Decrease Button LED Button Brightness Display Power Button
Led indicator	Power On/Off Sleep	Power On/Off Sleep
Mechanical		
Dimensions	398 x 308 x 58 mm	474 x 410 x 143.5 mm
Operating Temp.	-10°C to 55°C	-10°C to 60°C
Humidity	10% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Shock	Operating:40g for 18ms	MIL-STD-810G Method 516.6
Vibration	Operating:1.62/2.02/2.20g rms for XYZ/5-500Hz	MIL-STD-810G Method 514.6
Drop	MIL-STD-810G Method 516.6	MIL-STD-810G Method 516.6
Power		
Power Input	+9~36V DC	+9~36V DC
Power Consumption	35W (Typ.)	50W (Typ.)
AC Adapter	AC +110~240 V, Universal, ±10%	
Options		
Mounting Bracket and Kits	One robust bracket with locking handle (Can adjust from -5° to 90°)	One robust bracket with locking handle (Can adjust from -5° to 90°)
AR Glass	3mm Anti-reflective Protection Glass	3mm Anti-reflective Protection Glass
Certifications		
Safety	CE, FCC	CE, FCC, UL60950-1, CSA C22.2 No. 60950-1-07, EN60950-1, IEC60950-1, FIP67 Sealed Housing certified by SGS

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G-WIN IP67 Panel PC

Intel® Core™ i5-7200U Kaby Lake



Model Name	15" (IP67)	19" (IP67)
	R15IK3S-67C3(HB)	R19IK3S-67FTP
Display		
Resolution	1024 x 768	1280 x 1024
Brightness	250 nits (Optional for HB 1000 nits)	400 nits (Optional 1000 nit High Brightness) with Optical Bonding
Contrast Ratio	700:1 (Typ.)	1000 : 1 (Typ.)
Viewing Angle	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M, 8-bits	16.7M
Touch	5 Wire Resistive Touch	Projected Capacitive Multitouch
System		
Processor	Intel® Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)	Intel® Core™ i5-7200U Kaby Lake 2.5GHz (Turbo to 3.1GHz)
Chipset	Intel® HD graphics 620	Intel® HD graphics 620
Memory	1xDDR4 2133 MHz SO-DIMM, 4GB default, max. 16GB	1xDDR4 2133 MHz SO-DIMM, 4GB default, max. 16GB
BIOS	Insyde BIOS	Insyde BIOS
Storage	M.2 SATA II SSD, default 64GB, max. 512GB	M.2 SATA II SSD 64GB default, max. 512GB
OS	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Connectors		
USB	2 x USB 2.0 (Waterproof, IP67 grade)	1 x IP67 USB A Type connector with cover 1 x IP67 USB
LAN	1 x RJ45 (Waterproof, IP67 grade)	1 x RJ45 (Waterproof, IP67 grade)
Power	1 x DC-in (Waterproof, IP67 grade)	1 x DC-in (Waterproof, IP67 grade)
Serial Interface	1 x RS-232 (Waterproof, IP67 grade)	1x RS-232 (Waterproof, IP67 grade)
Mechanical		
Dimensions	398 x 308 x 58 mm	474 x 410 x 143.5 mm
Operating Temp.	-10°C to 55°C	-10°C to 60°C (Optional built-in Intelligent Heater to avoid moisture)
Humidity	10% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Power		
Power Input	+9~36V DC with Isolation Optional +6-60V DC, with Ignition On/Off delay	+9~36V DC with Isolation
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications		
Safety	CE, FCC	CE, FCC, UL508, UL60950-1, CSA C22.2 No. 60950-1-07, EN60950-1, IEC60950-1

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G-WIN IP67 Panel PC

Intel® Celeron® N2930 Bay Trail-M



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Model Name	15" (IP67)	19" (IP67)
	R15IB3S-67C3(HB)	R19IB3S-67FTP(HB)
Display		
Resolution	1024 x 768	1280 x 1024
Brightness	250 nits (Optional for HB 1000 nits)	400 nits (Optional 1000 nits High Brightness)
Contrast Ratio	700:1 (Typ.)	1000 : 1 (Typ.)
Viewing Angle	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M, 8-bits	16.7M
Touch	5 Wire Resistive Touch	Projected Capacitive Multitouch
System		
Processor	Intel® N2930 Bay Trail 1.83GHz	Intel® Celeron® N2930 2.16 GHz
Chipset	Bay Trail SoC Chipset	Intel® HD graphics
Memory	1 x DDR3L 1600 MHz SO-DIMM (Default 4GB, max. 8GB)	1 x DDR3L 1600 MHz SO-DIMM (Default 4GB, max. 8GB)
BIOS	AMI BIOS	AMI BIOS
Storage	mSATA SSD default 64GB (Max. 512GB)	mSATA SSD default 64GB (Max. 512GB)
OS	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded	Windows 10 IoT Enterprise Windows 8.1 Embedded Windows 7 Embedded
Connectors		
USB	2 x USB 2.0 (waterproof, IP67 grade)	1 x IP67 USB A Type connector with cover 1 x IP67 USB 2.0 connector
LAN	1 x RJ45 (Waterproof, IP67 grade)	1 x RJ45 (Waterproof, IP67 grade)
Power	1 x DC-in (Waterproof, IP67 grade)	1 x DC-in (Waterproof, IP67 grade)
Serial Interface	1 x RS-232 (Waterproof, IP67 grade)	1x RS-232 (Waterproof, IP67 grade)
Mechanical		
Dimensions	398 x 308 x 58 mm	474 x 410 x 143.5 mm
Operating Temp.	-10°C to 55°C	-10°C to 60°C (Optional built-in Intelligent Heater to avoid moisture)
Humidity	10% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Power		
Power Input	+9~36V DC with isolation (Phoenix type) Optional +6~60V DC, with Ignition On/Off delay	+9~36V DC (Isolation)
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications		
Safety	CE, FCC Class B, MIL-STD-810F/G	UL60950-1, CSA C22.2 No. 60950-1-07, EN60950-1, IEC60950-1, MIL-STD-810G Method 516.6, CE, FCC, UL508

G-WIN IP67 Display



Model Name	15" (IP67)	19" (IP67)
	R15L100-67C3HB	R19L100-67FTP
Display		
Resolution	1024 x 768	1280 x 1024
Brightness	1000 nits	400 nits/1000 nits for High brightness
Contrast Ratio	700:1 (Typ.)	1000:1 (Typ.)
Viewing Angle	-88~88 (H); -88~88 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M, 8 bits	16.7M
Touch	5 Wire Resistive	Projected Capacitive Multitouch
User Control		
Control Buttons	Menu/Auto-adjust/SWAP/PIP Button Brightness Up /Increase Button Brightness Down/Decrease Button LED Button Brightness Display Power Button	Menu/Auto-adjust/SWAP/PIP Button Brightness Up /Increase Button Brightness Down/Decrease Button LED Button Brightness Display Power Button
Led Indicator	Power On/Off Sleep	Power On/Off Sleep
Connectors		
USB	-	1 x IP67 USB for Touch Screen
Power	1 x DC-in (Waterproof/IP67 grade)	1 x IP67 DC +9~36V in
Serial Interface	1 x RS-232/USB for optional Touch Screen (Waterproof/IP67 grade)	1 x IP67 RS-232 for Remote Control (Optional)
VGA	1 x VGA (Waterproof/IP67 grade)	1 x IP67 grade Connectors for VG
DVI	1 x DVI (Waterproof/IP67 grade) optional	
Video	1 x Video (Waterproof/IP67 grade) for optional	
HDMI		1 x IP67 grade Connectors for HDMI (Optional)
Mechanical		
Dimensions	398 x 308 x 58 mm	474 x 410 x 111 mm
Operating Temp.	-20°C to 55°C	-10°C to 60°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Power		
Power Input	+9~36V DC with isolation	+9~36V DC with isolation
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications		
Safety	CE, FCC Class B, MIL810F for Vibration/Shock	UL60950-1, CSA C22.2 No. 60950-1-07, EN60950-1, IEC60950-1 CE, FCC, FIP67 Sealed Housing certified by SGS

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Overview

Oil rigs and remote pipeline locations are some of the most dangerous and challenging work environments anywhere. When looking for electronics to support these environments, devices must stand up to three key requirements:

1. Provide advanced system monitoring even in the most challenging conditions.
2. Accurately identify and track assets and communicate data from remote sites.
3. Withstand the highest scrutiny of certification and inspection.

Winmate rugged computers are designed for the harsh environments of an oil refinery or a drilling rig and come with ATEX Zone 2 and Class 1 Division 2 (C1D2) certifications. By employing automated processes, oil and gas companies can increase the number of production wells, improve production control and reap the benefits of modern technologies.

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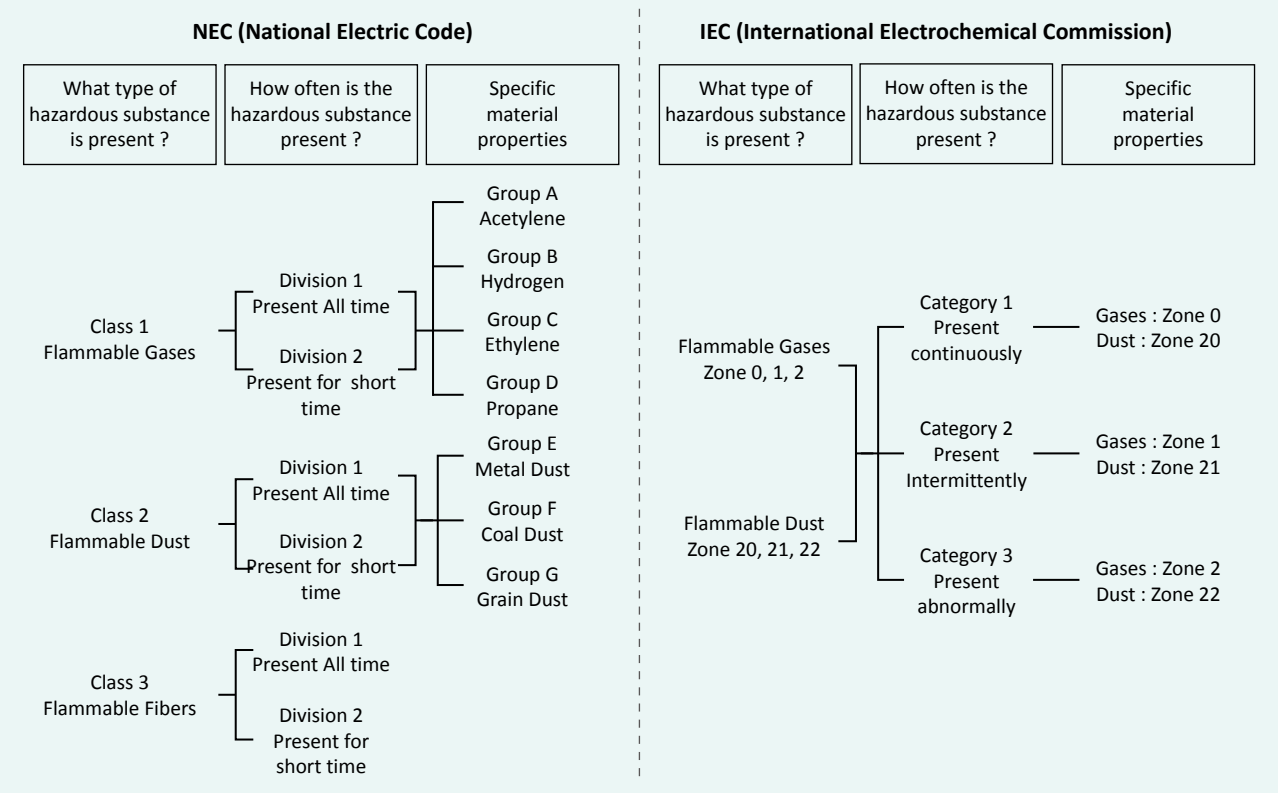
Technology

Testing & Certifications

To meet the safety qualification, Winmate offers ATEX and Class 1 Division 2 (C1D2) certified solutions for maintaining safe operations and collecting detailed, sensitive data in remote rig and pipeline locations.

For the classification of the equipment, Winmate generally uses both the North American National Electric Code (NEC) and the European ATEX directive.

NEC and IEC Certifications



C1D2 and ATEX-Certified Panel PC, Display & Box PC

HazLoc Series

Optional Configuration

Up to
8 GB

Memory

Up to
512 GB

Storage



Application



Outdoor Solution

**“THE HIGHEST STANDARD
IN RELIABILITY AND
SERVICE.”**

Total solution with 15-inch stainless display and DIN-Rail box PC for industrial outdoor application.

**“ EXPLOSION-PROOF FOR
SAFE OPERATIONS. ”**

- 15/19-inch Panel PC & Display, DIN Rail Box PC
- Intel Atom® N2600
- Intel® Celeron® N2930 Bay Trail-M
- Intel® Core™ i7-4650U



Class 1, Division 2, ATEX Zone 2, IECEx Zone 2

Wide Operating Temperature

Windows 10/8/7 OS

Fanless, streamlined enclosure for highly efficient heat dissipation

Accessories

AC Adapter

Power Cable

Mounting Screws

Driver CD

HazLoc Products

Intel Atom® N2600

Intel® Celeron® N2930 Bay Trail-M

Intel® Core™ i7-4650U



Model Name	15"	15"	15"	19"	
	R15L600-65EX	R15ID3S-65EX	R15IB3S-65EX	R19IHAT-66EX	IBDRW100-EX
Display					
Resolution	1024 x 768	1024 x 768	1024 x 768	1280 x 1024	-
Brightness	550 nits	550 nits	550 nits	600 nits	-
Contrast Ratio	700:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)	1000:1 (Typ.)	-
Active Area	304.1(H) x 228.1 (V)	304.1 (H) x 228.1 (V)	304.1 (H) x 228.1 (V)	376.32 (H) x 301.06 (V)	-
Viewing Angle	-88~88 (H); -88~88(V)	-88~88(H); -88~88(V)	-88~88(H); -88~88(V)	-85~85 (H);-80~80 (V)	-
Display Color	16.2M (6 bits+FRC)	16.2M (6 bits + FRC)	16.2M (6 bits + FRC)	16.7M	-
Touch	Resistive or Projected Capacitive Multitouch	Resistive Touch	Projected Capacitive Multitouch	Projected Capacitive Multitouch	-
System					
Processor	-	Intel Atom® N2600, 1.6 GHz	Intel® Celeron® N2930, 1.83 GHz	Intel® Core™ i7-4650U, 3.3GHz	Intel® Celeron® N2930, 1.83 GHz
BIOS	-	AMI BIOS	AMI BIOS	AMI BIOS	AMI BIOS
Chipset	-	Intel® NM10	Intel® SOC	Intel® HD graphics 5000	Intel® SOC
Memory	-	4GB DDR3 SO-DIMM 1333MHz	4GB DDR3L 1600MHz SO-DIMM (Up to 8GB)	4GB DDR3L 1600MHz SO-DIMM (Up to 8GB)	4GB DDR3L 1600MHz SO-DIMM (Up to 8GB)
Storage	-	64GB mSATA SSD (Up to 512GB)	64GB mSATA SSD (Up to 512GB)	128GB mSATA SSD (Up to 512 GB)	64GB mSATA SSD (Up to 512 GB)
OS	-	Windows 7 Pro for Embedded System Windows Embedded Std. 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Std. 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Std. 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded System Windows Embedded Std. 7
Connectors					
Serial Interface	2 x M12 Type RS-232	1 x M12 Type RS-232/422/485	1 x M12 Type RS-232/422/485	1 x RS-232/422/485 1 x RS-422/485 (Isolation)	1 x RS-232/422/485 1 x RS-422/485 (Isolation)
USB	1 x M12 Type USB (For touch)	1 x M21 Type USB Type-A Receptacle	1 x M21 Type USB Type-A Receptacle	1 x USB 2.0 terminal , 1 x USB 3.0, 2 x USB 2.0 (Female)	1 x USB3.0, 3 x USB2.0
LAN	-	1 x M12 Type RJ45	1 x M12 Type RJ45	1 x LAN terminal block, 1 x RJ45	4 x RJ45
Power	1 x M21 type DC in	1 x M21 Type DC in	1 x M21 Type DC in	1 x DC in	1 x DC-in Terminal Block
VGA	1 x M21 Type VGA	-	-	1 x VGA (DB15)	1 x VGA
Audio	-	-	-	-	1 x Line Out, Line In, Mic In
Digital I/O	-	-	-	-	1 x DIDO (9in/9out)
Mechanical					
Dimension	396 x 310 x 49 mm	396 x 310 x 49 mm	396 x 310 x 49 mm	474 x 410 x 111 mm	139 x 65 x 152 mm
Mounting	VESA Mount	VESA Mount	VESA Mount	VESA Mount	Desk/Wall Mounting
Environment					
Operating Temp.	-20°C to 50°C	-20°C to 50°C	-20°C to 50°C	-40°C to 70°C	-20°C to 60°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Shock	MIL-STD-810F/G Method 516.6	MIL-STD-810F/G Method 516.6	MIL-STD-810F/G Method 516.6	MIL-STD-810F/G Method 516.6	MIL-STD-810FG Method 516.6
Vibration	MIL-STD-810F/G Method 514.6	MIL-STD-810F/G Method 514.6	MIL-STD-810F/G Method 514.6	MIL-STD-810F/G Method 514.6	MIL-STD-810FG Method 514.6
Drop	MIL-STD-810F/G Method 516.6	MIL-STD-810F/G Method 516.6	MIL-STD-810F/G Method 516.6	MIL-STD-810F/G Method 516.6	-
Power					
Power Input	+9~36V DC (Isolation)	+9~36V DC (Isolation)	+9~36V DC (Isolation)	+9~36V DC (Isolation)	+9~36V DC (Isolation)
Power Consumption	20W (Typ.)	25W (Typ.)	35W (Typ.)	56W (Typ.)	25W (Typ.)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Hazardous Location	ATEX Zone 2 UL Class I, Div.2, ANSI, CAN/CSA C22.2	ATEX Zone 2, UL Class I, Div.2, ANSI, CAN	IECEx Zone 2, ATEX Zone 2, UL Class I, Div. 2,	IECEx Zone 2, ATEX Zone 2, UL Class I, Div. 2	Class 1 Division 2, ATEX II

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Marine

Overview

To meet the regulatory requirements of the marine industry, Winmate offers certified solutions for shipping navigation, monitoring & surveillance, and ship automation systems. Winmate understands the needs of the marine industry and provides solutions to industrial challenges:

- **Ruggedness:** Winmate reliability test ensure optimal performance in harsh maritime environments, including exposure to dry heat, extreme temperatures, humidity, high voltage, shock and vibration
- **Panel Options:** Transflective screen or a high brightness display.
- **Viewability:** As far as sunlight viewability goes, there are numerous combinations of display and touch technologies and backlight intensities.
- **Design and Electronics:** Powder coated aluminum housings feature anti-corrosion protection, handle significant vibration and shock as well as operation in high humidity.



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Technology

Certificate

All Winmate marine products are built and tested according to DNV 2.4 Standard, IEC60945 and IACS-E10.

	DNV GL is an autonomous and independent foundation with the objectives of safeguarding life, property and the environment at sea and on shore. DNV certification related to quality of ships, offshore units and installations of the system and components. DNV Requirements are harmonized with IACS Unified Requirements E10 and IEC publication 60945.
	International Association of Classification Societies (IACS) is an organization that provides technical support and guidance for promoting the safety of life, property and the environment through the verification of compliance with technical and engineering standards for the design, construction and life-cycle maintenance of ships, offshore units and other marine-related facilities.
	Equipment wished to be use in navigation and radio communication systems is to comply with IEC Publication No. 60945, "Maritime navigation and radio communication equipment and systems – General Requirements- Method of testing and required test results"

ECDIS Color Calibration

The Winmate Marine Displays and Panel PCs can be adjusted to day, dusk or night mode to accommodate any lighting situation. The CIE x, CIE y, CIE z are measured from 63 color tokens per mode (Day, Night, and Dusk). All of these color settings are calibrated at the factory to achieve accurate color reproduction referred by the IEC 61174 Standard. In the ECDIS-color calibrated models, quick function keys allow instant brightness adjustment to any of the three modes.



Note:

- Winmate can perform the individual panel color calibration by request
- Winmate can provide RGB table to ECDIS SW maker by request/key RGB parameter can be obtain from RS-232 (virtual COM) protocol

Product

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Marine Panel PC, Display & Box PC

Marine Series

Optional Configuration



AR Glass



Application



Automated Identification System

“COMPLY WITH MARINE INDUSTRY STANDARDS IEC 62376 & RTCM 10900.5.”

AIS solution for yacht with 10.1 marine HMI features multitouch screen and waterproof front panel.

“ RESISTS HUMIDITY, SHOCK & VIBRATION. ”

- 10.1-inch Marine HMI
- 15~26-inch Marine Panel PC & Display
- Marine EAC Box PC



DNV 2.4, IEC 60945 4th Edition, IACS-E10 certified

Wide range DC power input (+9~36V)

Front panel OSD control

Dimming control backlight brightness from (0%~100%)

Accessories

AC Adapter

Power Cable

Mounting Screws

Driver CD

Marine Display

Projected Capacitive Multitouch



Model Name	15"	19"	24" (16:9)	26" (16:10)
	R15L600-MRA3FP	R19L300-MRA1FP	W24L100-MRA1FP	W26L100-MRA1FP
Display				
Resolution	1024 x 768	1280 x 1024	1920 x 1080	1920 x 1200
Brightness	400 nits	350 nits	350 nits	350 nits
Contrast Ratio	700:1 (Typ.)	1000:1 (Typ.)	5000:1 (Typ.)	1500:1 (Typ.)
Active Area	306 (H) x 230 (V)	376.3 2 (H) x 301.06 (V)	531.36 (H) x 298.89 (V)	550.1 (H) x 343.8 (V)
Viewing Angle	-80~80 (H); -60~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)	-88~88 (H); -88~88 (V)
Pixel Pitch	0.2947 (H) x 0.2947 (V)	0.294 (H) x 0.294 (V)	0.276 (H) x 0.276 (V)	0.2865 (H) x 0.2865 (V)
Display Color	16.2 M colors, 8 bits/color	16.7 M colors, 8 bits/color	16.7 M colors, 8 bits/color	16.7 M colors, 8 bits/color
Input Signals				
DVI-D Signal	DVI-D 24pin (Female)	DVI-D 24 pin (Female)	DVI-D 24 pin (Female)	DVI-D 24 pin (Female)
DC Power Signal	3pin Terminal block (Phoenix type)	3pin Terminal block (Phoenix type)	3pin Terminal block (Phoenix type)	3pin Terminal block (Phoenix type)
Touch Screen	Projected Capacitive Multitouch (Optional AR Protection Glass)	Projected Capacitive Multitouch (Optional AR Protection Glass)	Projected Capacitive Multitouch (Optional AR Protection Glass)	Projected Capacitive Multitouch (Optional AR Protection Glass)
Remote control via RS-232	D-SUB 9pin connector (Female)	D-SUB 9 pin connector (Female)	D-SUB 9 pin connector (Female)	D-SUB 9 pin connector (Female)
VGA	D-SUB 15pin (Female)	D-SUB 15pin (Female)	D-SUB 15 pin (Female)	D-SUB 15pin (Female)
HDMI	1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4	1 x HDMI 1.4
User Controls				
Display Control	Front Panel OSD Control with VR Brightness Knob Control	Front Panel OSD Control with VR Brightness Knob Control	Front Panel OSD Control with VR Brightness Knob Control	Front Panel OSD Control with VR Brightness Knob Control
OSD Remote Control	Remote Control via RS-232 Serial Interface	Remote Control via RS-232 Serial Interface	Remote Control via RS-232 Serial Interface	Remote Control via RS-232 Serial Interface
Power				
Power Input	+24V DC with Isolation (+9~36V acceptable)	+24V DC with Isolation (+9~36V acceptable)	+24V DC with Isolation (+9~36V acceptable)	+24V DC with Isolation (+9~36V acceptable)
Power Consumption	80W (Max)	80W (Max)	80W (Max)	80W (Max)
Mechanical				
Dimension	363 x 312 x 66.5 mm	429 x 382 x 72.8 mm	595 x 385 x 63.8 mm	621 x 432.4 x 85.5 mm
Mounting	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount
Environment				
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	0.7g@DNV2.4 (Class A)	0.7g@DNV2.4 (Class A)	0.7g@DNV2.4 (Class A)	0.7g@DNV2.4 (Class A)
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66	Front IP66	Front IP66	Front IP66
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Marine	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th, DNV GL-CG-0339, IACS E10

Vertical Market Solutions

Product

Stainless

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Marine

Military

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Marine Panel PC

Intel® Celeron® N2930 Bay Trail-M
Intel® Core™ i5-5250U Broadwell

Vertical Market Solutions



Model Name	10.1" (16:10)	15"	19"
	W10IB3S-MRH2	R15IH3S-MRA3FP	R19IH3S-MRA1FP
Display			
Resolution	1280 x 800	1024 x 768	1280 x 1024
Brightness	300 nits	400 nits	350 nits
Contrast Ratio	800:1 (Typ.)	700:1 (Typ.)	1000:1 (Typ.)
Active Area	216.96 (H) x 135.6 (V)	306.0 (H) x 230.0 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-89~89 (H); -89~89 (V)	-80~80 (H); -60~80 (V)	-85~85 (H); -80~80 (V)
Display Color	262K, 6 bit	16.7 M colors, 8 bits/color	16.7 M colors, 8 bits/color
Touch	Projected Capacitive Multitouch	Projected Capacitive Multitouch (Optional AR Protection Glass)	Projected Capacitive Multitouch (Optional AR Protection Glass)
System			
Processor	Intel® Celeron® N2930 Bay Trail-M, 1.83GHz	Intel® Core™ i5-5250U Broadwell 1.6GHz (Turbo to 2.7GHz)	Intel® Core™ i5-5250U Broadwell 1.6GHz (Turbo to 2.7GHz)
Chipset	Intel Atom® SoC Integrated	Intel® 8 series QM87	Intel® 8 series QM87
Memory	4GB DDR3L 1066/1333 SODIMM	4Gb DDR3L-1066 SODIMM (Max. 16GB)	4Gb DDR3L-1066 SODIMM (Max. 16GB)
Security	Trusted Platform Module (TPM 1.2)	Trusted Platform Module (TPM 1.2)	Trusted Platform Module (TPM 1.2)
Graphic Chipset	Intel® HD Graphics	Intel® HD Graphics 5500	Intel® HD Graphics 5500
Ethernet Controller	1 x Gigabit LAN (M12 type)	Dual Ethernet Gb LAN	Dual Ethernet Gb LAN
Storage	64GB mSATA SSD	64GB mSATA SSD (Max. 256GB)	64GB mSATA SSD (Max. 256GB)
Speaker	1 x 1 Watt Speaker	2 x 2W Speaker	2 x 2W Speaker
Buzzer	-	75 dB~80 dB, 2300 Hz, 1m	75 dB~80 dB, 2300 Hz, 1m
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7- WS7P	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Std. Windows Embedded Std. 7 Windows 7 Pro for Embedded System	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Std. Windows Embedded Std. 7 Windows 7 Pro for Embedded System
Connectors			
Power	1 x DC in (M12 type)	1 x 3-pin terminal block (Phoenix type)	1 x 3-pin terminal block (Phoenix type)
LAN	1 x Gigabit LAN (M12 type)	2 x RJ45	2 x RJ45
Serial Interface	2 x RS-422 (M12 type) 1 x RS-422 when with WWAN (M12 type)	1 x RS-232/422/485	1 x RS-232/422/485
USB	1 x USB 2.0 (M12 type)	2 x USB3.0	2 x USB3.0
HDMI	-	1 x HDMI	1 x HDMI
Digital I/O	-	8 Channel Isolated DIDO (Optional)	8 Channel Isolated DIDO (Optional)
NMEA	-	4 x NMEA 0183 port (Optional)	4 x NMEA 0183 port (Optional)
Mechanical			
Dimensions	263.28 x 173.6 x 40.2 mm	363 x 312 x 66.5 mm	429 x 382 x 72.8 mm
Mounting	Panel Mount, VESA 75 x 75	Panel Mount, VESA 100 x 100	Panel Mount, VESA 100 x 100
Cooling System	Fanless design	Fanless design	Fanless design
Power			
Power Input	+9~36V DC	+24V DC with Isolation (+9~36V acceptable)	+24V DC with Isolation (+9~36V acceptable)
Power Consumption	25W (Typ.)	80W (Max.)	80W (Max.)
Environment			
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	0.7g@DNV2.4 (Class A)	0.7g@DNV2.4 (Class A)	0.7g@DNV2.4 (Class A)
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front: IP65 water and dust proof, Full: IP44	Front IP66	Front IP66
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC
Marine	Comply with IEC60945 (Test report)	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th, DNV GL-CG-0339, IACS E10

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

Marine Panel PC

Intel® Core™ i5-5250U Broadwell



Model Name	24" (16:9)	26" (16:10)
	W24IH3S-MRA1FP	W26IH3S-MRA1FP
Display		
Resolution	1920 x 1080	1920 x 1200
Brightness	350 nits	350 nits
Contrast Ratio	5000:1 (Typ.)	1500:1 (Typ.)
Active Area	531.36 (H) x 298.89 (V)	550.1 (H) x 343.8 (V)
Viewing Angle	-89~89 (H); -89~89 (V)	-88~88 (H); -88~88 (V)
Pixel Pitch	0.276 (H) x 0.276 (V)	0.2865 (H) x 0.2865 (V)
Display Color	16.7 M colors, 8 bits/color	16.7 M colors, 8 bits/color
Touch	Projected Capacitive Multi-touch (Optional AR Protection Glass)	Projected Capacitive Multi-touch (Optional AR Protection Glass)
System		
Processor	Intel® Core™ i5-5250U Broadwell 1.6GHz (Turbo to 2.7GHz)	Intel® Core™ i5-5250U Broadwell 1.6GHz (Turbo to 2.7GHz)
Chipset	Intel® 8 series QM87	Intel® 8 series QM87
Memory	4Gb DDR3L-1066 SODIMM (Max. 16GB)	4Gb DDR3L-1066 SODIMM (Max. 16GB)
Security	Trusted Platform Module (TPM 1.2)	Trusted Platform Module (TPM 1.2)
Graphic Chipset	Intel® HD Graphics 5500	Intel® HD Graphics 5500
Ethernet Controller	Dual Ethernet Gb LAN	Dual Ethernet Gb LAN
Storage	64GB mSATA SSD (Max. 256GB)	64GB mSATA SSD (Max. 256GB)
Speaker	2 x 2W Speaker	2 x 2W Speaker
Buzzer	75 dB~80 dB, 2300 Hz, 1m	75 dB~80 dB, 2300 Hz, 1m
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Std. Windows Embedded Std. 7 Windows 7 Pro for Embedded System	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows Embedded 8 Std. Windows Embedded Std. 7 Windows 7 Pro for Embedded System
Connectors		
Power Input	1 x 3-pin terminal block (Phoenix type)	1 x 3-pin terminal block (Phoenix type)
Ethernet	2 x RJ45	2 x RJ45
Serial Interface	1 x RS-232/422/485	1 x RS-232/422/485
USB	2 x USB3.0, 1 x USB2.0	2 x USB3.0, 1 x USB2.0
HDMI	1 x HDMI	1 x HDMI
DIDO	8 Channel Isolated DIDO (Optional)	8 Channel Isolated DIDO (Optional)
NMEA	4 x NMEA 0183 port (Optional)	4 x NMEA 0183 port (Optional)
Mechanical		
Dimensions	595 x 385 x 63.8 mm	621 x 432.4 x 85.5 mm
Mounting	Panel Mount, VESA Mount	Panel Mount, VESA Mount
Cooling System	Fanless design	Fanless design
Housing	Anodized Aluminum Bezel	Anodized Aluminum Bezel
Power		
Power Input	+24V DC with Isolation (+9~36V acceptable)	+24V DC with Isolation (+9~36V acceptable)
Power Consumption	80W (Max.)	80W (Max.)
Environment		
Operating Temp.	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	0.7g@DNV2.4 (Class A)	0.7g@DNV2.4 (Class A)
Shock	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66	Front IP66
Certifications		
Safety	CE, FCC	CE, FCC
Marine	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th, DNV GL-CG-0339, IACS E10

Vertical Market Solutions

Product

Stainless

Heavy
Duty

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Marine

Military

Medical

Marine Display

Resistive Touch



Model Name	10.4"	12.1"	15"	17"	19"
	R10L210-MRM2	R12L600-MRM2	R15L600-MRM2	R17L500-MRM1	R19L300-MRA1
Display					
Resolution	800 x 600	1024 x 768	1024 x 768	1280 x 1024	1280 x 1024
Brightness	400 nits	500 nits	400 nits	350 nits	400 nits
Contrast Ratio	500:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)
Active Area	211.2 (H) x 158.4 (V)	245.76 (H) x 184.32 (V)	304.128 (H) x 228.096 (V)	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-80~80 (H); -60~80 (V)	-80~80 (H); -70~70 (V)	-80~80 (H); -60~80 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Pixel Pitch	0.264 (H) x 0.264 (V)	0.240 (H) x 0.240 (V)	0.297(H) x 0.297 (V)	0.264 (H) x 0.264 (V)	0.294 (H) x 0.294 (V)
Display Color	16.2M (8bits/color)	262k/16.2M	16.2M,8-bits	6-bits+Hi-FRC	16.7M (8bits/colors)
Touch	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass
Connectors					
RGB Signal	D-SUB 15P (Female)	D-SUB 15P (Female)	D-SUB 15P (Female)	D-SUB 15P connector (Female)	D-SUB 15P connector (Female)
Composite Video	RCA phono plug	RCA phono plug	RCA phono plug	RCA phono plug	RCA phono plug
S-Video Signal	S-Video (SVHS) plug	S-Video (SVHS) plug	S-Video (SVHS) plug	S-Video (SVHS) plug	S-Video (SVHS) plug
DVI-D Signal	DVI-D input 24-pin	DVI-D input 24-pin	DVI-D input 24-pin	DVI-D input 24-pin connector	DVI-D input 24-pin connector
DC Power Signal	Screw terminal block	Screw terminal block	Screw terminal block	Screw terminal block	Screw terminal block
AC Power Signal (Optional)	Std. IEC inlet	Std. IEC inlet	Std. IEC inlet	Yes	Yes
Touch Screen	D-SUB 9P (Female)	D-SUB 9P (Female)	D-SUB 9P (Female)	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)
Remote control via RS-232	D-SUB 9P (Female)	D-SUB 9P (Female)	D-SUB 9P (Female)	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)
User Controls					
Power Control	Power On/Off via Front Button	Power On/Off via Front Button	Power On/Off via Front Button	Power On/Off via Front Button	Power On/Off via Front Button
VR Control	VR Brightness Knob Control	VR Brightness Knob Control	VR Brightness Knob Control	VR Brightness Knob Control	VR Brightness Knob Control
Display Control	On Screen Display control(OSD)	On Screen Display control(OSD)	On Screen Display control(OSD)	On Screen Display control(OSD)	On Screen Display control (OSD)
OSD Remote Control	OSD Remote Control via RS-232	OSD Remote Control via RS-232	OSD Remote Control via RS-232	OSD Remote Control via RS-232	OSD Remote Control via RS-232
LED indicators	Power Mode Status LED	Power Mode Status LED	Power Mode Status LED	Power Mode Status LED	Power Mode Status LED
Mechanical					
Mounting	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount
Environment					
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz /1Grms /3 Axis	5Hz~500Hz /1Grms /3 Axis	5Hz~500Hz /1Grms /3 Axis	5Hz~500Hz /1Grms /3 Axis	5Hz~500Hz /1Grms /3 Axis
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66	Front IP66	Front IP66	Front IP66	Front IP66
Power					
Power Input	+24V DC	+9-36V DC	+24V DC	+9-36V DC	+24V DC
Power Consumption	21W (Typ.)	32W (Typ.)	40W (Typ.)	48W (Typ.)	45W (Typ.)
Certifications					
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Marine	IEC60945 4th, DNV GL-CG-0339, IACS E1	IEC60945 4th	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th	IEC60945 4th, DNV GL-CG-0339, IACS E10

Product

Stainless

Heavy Duty

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Marine

Military

Medical

Marine Display

Resistive Touch



Model Name	19"	20.1"	23.1"	24" (16:9)
	R19L300-MRA2MT	R20L100-MRA2	R23L100-MRS1	W24L100-MRA1
Display				
Resolution	1280 x 1024	1600 x 1200	1600 x 1200	1920 x 1080
Brightness	350 nits	300 nits	500 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	800:1 (Typ.)	600:1 (Typ.)	5000:1 (Typ.)
Active Area	376.32 (H) x 301.06 (V)	408 (H) x 306 (V)	470.4 (H) x 352.8 (V)	531.36 (H) x 298.89 (V)
Viewing Angle	-85~85(H); -80~80(V)	-89~89 (H); -89~89 (V)	-85~85 (H); -85~85 (V)	178 (H); 178 (V)
Display Color	16.7M, 6 bit	16.7M (8bits color)	16.7M (8bits/color)	16.7M, 8bit
Touch	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass
Connectors				
RGB Signal	D-SUB 15P connector (Female)	D-SUB 15P connector (Female)	D-SUB 15P connector (Female)	D-SUB 15P connector (Female)
Composite Video	RCA phono plug	RCA phono plug	RCA phono plug	-
S-Video Signal	S-Video (SVHS) plug	S-Video (SVHS) plug	S-Video (SVHS) plug	-
DVI-D Signal	DVI-D input 24-pin connector	DVI-D input 24-pin connector	DVI-D input 24-pin connector	DVI-D input 24-pin connector
DC Power Signal	Screw terminal block	Screw terminal block	Screw terminal block	Screw terminal block
AC Power Signal (Optional)	Yes	-	Std IEC Inlet	-
Touch Screen	USB connector (Female)	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)
Remote control via RS-232	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)	D-SUB 9P connector (Female)
User Controls				
Power Control	Power On/Off via Front Button	Power On/Off via Front Button	Power On/Off via Front Button	Power On/Off via Front Button
VR Control	VR Brightness Knob Control	VR Brightness Knob Control	VR Brightness Knob Control	VR Brightness Knob Control
Display Control	On Screen Display control(OSD)	On Screen Display control (OSD)	On Screen Display control (OSD)	On Screen Display control (OSD)
OSD Remote Control	OSD Remote Control via RS-232	OSD Remote Control via RS-232	OSD Remote Control via RS-232	OSD Remote Control via RS-232
LED indicators	Power Mode Status LED	Power Mode Status LED	Power Mode Status LED	Power Mode Status LED
Power				
Power Input	+24V DC	+9-36V DC	+24V DC	+24V DC
Power Consumption	45W (Typ.)	70W (Typ.)	80W (Typ.)	80W (Typ.)
Mechanical				
Mounting	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount
Environment				
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66	Front IP66	Front IP66	Front IP66
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC
Marine	IEC60945 4th	IEC60945 4th	IEC60945 4th, DNV GL-CG-0339, IACS E10	IEC60945 4th, DNV GL-CG-0339, IACS E10

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Marine Panel PC

Intel Atom® N2600 Dual-core



Model Name	10.4"	12.1"	15"
	R10ID3S-MRM2	R12ID3S-MRM2	R15ID3S-MRM2
Display			
Resolution	800 x 600	1024 x 768	1024 x 768
Brightness	400 nits	500 nits	400 nits
Contrast Ratio	500:1 (Typ.)	700:1 (Typ.)	700:1 (Typ.)
Active Area	211.2 (H) x 158.4 (V)	245.76 (H) x 184.32 (V)	304.128 (H) x 228.096 (V)
Viewing Angle	-80~80 (H); -60~80 (V)	-80~80 (H); -70~70 (V)	-80~80 (H); -60~80 (V)
Display Color	16.2M (8bits/color)	262k/16.2M	16.2M, 8-bits
Touch	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass
System			
Processor	Intel Atom® N2600 Dual-core 1.6GHz	Intel Atom® N2600 Dual-core 1.6GHz	Intel Atom® N2600 Dual-core 1.6GHz
BIOS	AMI 4Mbit Flash	AMI 4Mbit Flash	AMI 4Mbit Flash
Chipset	Intel® NM10 express chipset	Intel® NM10 express chipset	Intel® NM10 express chipset
Memory	1 x SODIMM DDR3-800, max.4GB (Default 2 GB)	1 x SODIMM DDR3-800, max.4GB (Default 2 GB)	1 x SODIMM DDR3-800, max.4GB (Default 2 GB)
Graphic Chipset	Integrated	Integrated	Integrated
Ethernet	Dual Broadcom BCM57780 GbE controller	Dual Broadcom BCM57780 GbE controller	Dual Broadcom BCM57780 GbE controller
Audio	Realtek ALC886 HD Audio Codec	Realtek ALC886 HD Audio Codec	Realtek ALC886 HD Audio Codec
Storage	32GB SSD	32GB SSD	32GB SSD
Connectors			
Power Input	1 x DC Terminal block	1 x DC Terminal block	1 x DC Terminal block
Ethernet	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps
Serial Interfaces	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485
USB	2 x USB Type-A Receptacle	2 x USB Type-A Receptacle	2 x USB Type-A Receptacle
VGA	1 x VGA 15P DSUB (Female)	1 x VGA 15P DSUB (Female)	1 x VGA 15P DSUB (Female)
Power			
Power Input	+9~36V DC power supply with terminal block	+9~36V DC power supply with terminal block	+9~36V DC power supply with terminal block
Power Consumption	30W (Typ.)	30W (Typ.)	40W (Typ.)
Mechanical			
Cooling System	Fanless design	Fanless design	Fanless design
Mounting	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount
Environment			
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66	Front IP66	Front IP66
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC
Marine	IEC60945, DNV GL-CG-0339, IACS-E10	IEC60945, DNV GL-CG-0339, IACS-E10	IEC60945, DNV GL-CG-0339, IACS-E10

Marine Panel PC

Intel Atom® N2600 Dual-core



Model Name	17"	19"	24" (16:9)
	R17ID3S-MRM1	R19L300-MRA2ID3S	W24L100-MRA1ID3S
Display			
Resolution	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	350 nits	350 nits	250 nits
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)	5000:1 (Typ.)
Active Area	304.128 (H) x 228.096 (V)	376.32 (H) x 301.06 (V)	531.36 (H) x 298.89 (V)
Viewing Angle	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (H)
Pixel Pitch	0.297 (H) x 0.297 (V)	0.294 (H) x 0.294 (V)	0.276 (H) x 0.276 (V)
Display Color	6-bits+Hi-FRC	16.7M,6 bit	16.7M,8bit
Touch	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass
System			
Processor	Intel Atom® N2600 Dual-core 1.6GHz	Intel Atom® N2600 Dual-core 1.6GHz	Intel Atom® N2600 Dual-core 1.6GHz
BIOS	AMI 4Mbit Flash	AMI 4Mbit Flash	AMI 4Mbit Flash
Chipset	Intel® NM10 express chipset	Intel® NM10 express chipset	Intel® NM10 express chipset
Memory	1 x SODIMM DDR3-800 max.4GB (Default 2 GB)	1 x SODIMM DDR3-800 max.4GB (Default 2 GB)	1 x DDR3 800/1066MHz SODIMM,(Max 4GB)
Graphic Chipset	Integrated	Integrated	Integrated
Ethernet	Dual Broadcom BCM57780 GbE controller	Dual Broadcom BCM57780 GbE controller	Dual Broadcom BCM57780 GbE controller
Audio	Realtek ALC886 HD Audio Codec	Realtek ALC886 HD Audio Codec	Realtek ALC886 HD Audio Codec
Storage	32GB SSD	32GB SSD	32GB SSD
Expansion slot	2 x RS-232	4 x RS-232 or 4 x Isolate RS-422/485 (Optional)	4 x RS-232 or 4 x Isolate RS-422/485 (Optional)
Connectors			
Power Input	1 x DC Terminal block	1 x DC Terminal block	1 x DC Terminal block
Ethernet	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps
Serial Interfaces	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485	2 x RS-232, 1 x RS-232/422/485
USB	2 x USB Type-A Receptacle	2 x USB Type-A Receptacle	2 x USB Type-A Receptacle
VGA	1 x VGA 15P DSUB (Female)	1 x VGA 15P DSUB (Female)	1 x VGA 15P DSUB (Female)
Mechanical			
Cooling System	Fanless design	Fanless design	Fanless design
Mounting	Panel Mount, VESA Mount	Panel Mount, VESA Mount	Panel Mount, VESA Mount
Environment			
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66	Front IP66	Front IP66
Power			
Power Input	+9~36V DC	+9~36V DC	+9~36V DC
Power Consumption	40W (Typ.)	100W (Typ.)	100W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC
Marine	IEC60945, DNV GL-CG-0339, IACS E10	IEC60945, DNV GL-CG-0339, IACS E10	IEC60945, DNV GL-CG-0339, IACS E10

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Marine Panel PC

Intel® Core™ i7-3517UE

Vertical Market Solutions



Model Name	15"	17"	19"	24" (16:9)
	R15IV3S-MRM2	R17IV3S-MRM1	R19IV3S-MRA2	W24L100-MRA1IV3S
Display				
Resolution	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080
Brightness	400 nits	350 nits	350 nits	250 nits
Contrast Ratio	700:1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)	5000:1 (Typ.)
Active Area	304.128 (H) x 228.096 (V)	304.128 (H) x 228.096 (V)	376.32 (H) x 301.06 (V)	531.36 (H) x 298.89 (V)
Viewing Angle	-80~80 (H); -60~80 (V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.297 (H) x 0.297 (V)	0.297 (H) x 0.297 (V)	0.294 (H) x 0.294 (V)	276.75 (H) x 276.75 (V)
Display Color	16.2M, 8 bits	6 bits+Hi-FRC	16.7M, 6 bit	16.7M, 8 bit
Touch	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass	SAW, 5 Wire Resistive or 3mm Anti-reflective protection glass
System				
Processor	Intel® Core™ i7-3517UE 1.7GHz	Intel® Core™ i7-3517UE 1.7GHz	Intel® Core™ i7-3517UE 1.7GHz	Intel® Core™ i7-3517UE 1.7GHz
BIOS	AMI system BIOS	AMI system BIOS	AMI system BIOS	AMI system BIOS
Chipset	Intel® HM 76	Intel® HM 76	Intel® HM 76	Intel® HM 76
Memory	1 x SODIMM DDR3 1333/1600 (Max 8GB)	1 x SODIMM DDR3 1333/1600 (Max 8GB)	1 x SODIMM DDR3 1333/1600 (Max 8GB)	1 x SODIMM DDR3 1333/1600 (Max 8GB)
Graphic Chipset	Intel® HD Graphics 4000 support DX11, OpenGL 3.1, OCL 1.1	Intel® HD Graphics 4000 support DX11, OpenGL 3.1, OCL 1.1	Intel® HD Graphics 4000 support DX11, OpenGL 3.1, OCL 1.1	Intel® HD Graphics 4000 support DX11, OpenGL 3.1, OCL 1.1
Ethernet	Intel® 82579-LM GbE PHY + Intel® WG82574L GbE	Intel® 82579-LM GbE PHY + Intel® WG82574L GbE	Intel® 82579-LM GbE PHY + Intel® WG82574L GbE	Intel® 82579-LM GbE PHY + Intel® WG82574L GbE
Storage	32GB mSATA SSD	32GB mSATA SSD	32GB mSATA SSD	32GB mSATA SSD
Connectors				
Power Input	1 x DC Terminal block	1 x DC Terminal block	1 x DC Terminal block	1 x DC Terminal block
Ethernet	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps	2 x RJ 45-10/100/1000 Mbps
Serial Interfaces	1 x RS-232, 1 x RS-232/422/485, 2 x RS-232 or 2 x Isolation RS-422/485 (Optional)	1 x RS-232, 1 x RS-232/422/485, 2 x RS-232 or 2 x Isolation RS-422/485 (Optional)	1 x RS-232, 1 x RS-232/422/485, 2 x RS-232 or 2 x Isolation RS-422/485 (Optional)	1 x RS-232, 1 x RS-232/422/485, 2 x RS-232 or 2 x Isolation RS-422/485 (Optional)
USB	2 x USB 3.0	2 x USB 3.0	2 x USB 3.0	2 x USB 3.0
VGA	1 x VGA	1 x VGA	1 x VGA	1 x VGA
Mechanical				
Cooling System	Fanless design	Fanless design	Fanless design	Fanless design
Mounting	Panel (Flush) Mount	Panel (Flush) Mount	Panel (Flush) Mount	Panel (Flush) Mount
Housing	Aluminum with powder coating design	Aluminum with powder coating design	Aluminum with powder coating design	Aluminum with powder coating design
Environment				
Operating Temp.	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration	15G, 11ms duration
IP Rating	Front IP66, Rear IP54 rear	Front IP66, Rear IP54 rear	Front IP66, Rear IP54 rear	Front IP66, Rear IP54 rear
Power				
Power Input	+9~36V DC	+9~36V DC	+9~36V DC	+9~36V DC
Power Consumption	40W (Typ.)	40W (Typ.)	50W (Typ.)	50W (Typ.)
Certifications				
Safety	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Marine EAC Box PC

Intel® Core™ i5-7200U Kaby Lake
Intel Atom® Dual-core



Model Name	I330EAC-IKW	I330EAC-ID3
System		
Processor	Intel® Core™ i5-7200U Kaby Lake, 2.5GHz (Turbo to 3.1GHz)	Intel Atom® D2550 Dual-core 1.86 GHz
BIOS	Insyde BIOS	AMI 4Mbit Flash
Chipset	Intel® SoC Integrated	Intel® NM10
Memory	1 x SODIMM DDR4L-2133 4GB (Max up to 16GB)	1 x SODIMM, Max 4GB DDR3L 1600 (2GB Default)
Storage	1 x mSATA SSD 64GB (Default) 2 x 2.5" Removable SSD/HDD	1 x mSATA SSD 32G (Default) 1 x 2.5" SATA HDD (Optional)
Graphic Chipset	Intel® HD Graphics 620	Intel® NM10, LVDS/CRT
Ethernet Controller	1000 Base-Tx Gigabit Ethernet Compatible	-
Connectors		
Power	1 x 3 pin Power Input w/Phoenix type Terminal Block	1 x 3 pin Power Input w/Phoenix type Terminal Block
Ethernet	2 x RJ45 (Giga LAN)	2 x RJ45 (Giga LAN)
Serial Interface	1 x RS-232/422/485 port (Selectable by BIOS)	3 x Isolated RS-422/485 auto-detected with Indicator
USB	4 x USB 3.0	2 x USB
GPIO	8 x Isolated DIDO, 4 In/4out (Optional)	1 x GPIO 4 in/out by Phoenix type Terminal Block
NMEA 0183 Port	8 x NMEA 0183 (Optional)	
Display Output	1 x HDMI Output 1 x VGA 1 x DVI	1 x VGA
Audio	1 x Audio in Jack 1 x Audio out Jack	1 x Micro in, Line out Line in Jack
User Interfaces		
Control Buttons	1 x Power Button 1 x Reset Button	1 x Power Button 1 x Reset Button
Mechanical		
Dimensions	316.44 x 206.8 x 62.1 mm	296 x 169 x 66 mm
Mounting	VESA, Wall, Desktop	VESA, Wall, Desktop
Color	Black	Silver
Housing	Aluminum	Aluminum
Environment		
Operating Temp.	-15°C to 55°C	-15°C to 55°C
Humidity	5% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Vibration	0.7g@DNVGL CG-0339 (Class A)	5Hz~500Hz/1Grms/3 Axis
Shock	15G, 11ms duration	15G, 11ms duration
Power		
Power Input	+24V DC with 1.5KV DC Isolation Resistance (+9~36V DC Acceptable)	+24V DC with 1.5KV DC Isolation Resistance (+9~36V DC Acceptable)
Power Consumption	50W (Typ.)	40W (Typ.)
Certifications		
Safety	CE, FCC	CE, FCC
Marine	IEC 60945 4th Edition (Test Report Available)	IEC60945, DNV GL-CG-0339, IACS-E10

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Military

Overview

Winmate's military panel PC and display are designed to be industrial grade, and undergo rigorous testing to ensure safety and performance, going beyond military standard compliance.

Winmate understands the needs of military industry and provides a solution to industrial challenges:

- **MIL-STD 810-G Testing:** For MIL-STD 810G compliance, Winmate tests the product against extreme environmental conditions (temperature, shock, vibration, humidity).
- **MIL-STD 461-F Testing:** For MIL-STD 461F compliance, detailed testing specification ensures that the product meets the requirements for the control of electromagnetic interference.

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

Built to survive drops, shocks, liquid spills, vibrations, dust, salt, and extreme temperatures, our specially designed military line of products has been tested for MIL-STD-810G environmental and MIL-STD 461F EMC standards.



Military

Technology

Military Certifications

All Winmate military products are built and tested according to military standards MIL-STD-810 and MIL-STD-461.



MIL-STD-461E/F

MIL-STD-461 is a United States Military Standard that describes how to test equipment for electromagnetic compatibility.

Specifically, MIL-STD-461F details testing specification to ensure the conducted emissions (CE), conducted susceptibility (CS), radiated emissions (RE), and radiated susceptibility (RS) of a system can meet the requirements for the control of electromagnetic interference.

- MIL-STD-461 Method - CE101/CE102: Conducted Emissions
- MIL-STD-461 Method - RE101/RE102: Radiated Emissions
- MIL-STD-461 Method - CS101/CS106/CS109/CS114/CS115/CS116: Conducted Susceptibility
- MIL-STD-461 Method - RS101/RS103: Radiated Susceptibility



MIL-STD-810F/G

The MIL-STD-810 test series are approved for use by all departments and agencies of the United States Department of Defense (DoD).

The standard describes environmental management and engineering processes that can be of enormous value to generate confidence in the environmental worthiness and overall durability of a system design.

- MIL-STD-810 Method 501.4: High Temperature
- MIL-STD-810 Method 502.4: Low Temperature
- MIL-STD-810 Method 507.4: Humidity
- MIL-STD-810 Method 514.5: Vibration
- MIL-STD-810 Method 516.5: Shock

Special Connectors

Military Connectors

Winmate military panel PCs and displays come with MIL-DTL-38999 type I and III connectors – high-performance cylindrical connectors for cable-to-panel applications in military, air traffic controller, or other mission-critical situations.

MIL-DTL-38999/I Power Connector

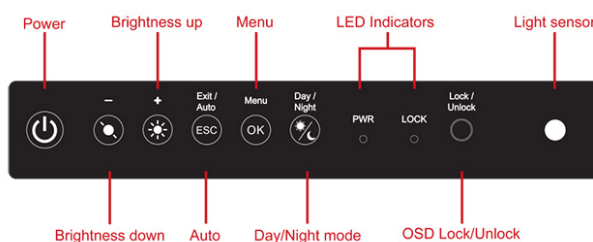


MIL-DTL-38999/III VGA/RS-232/USB-A/LAN



Panel Viewability & OSD Control

The high-resolution display is fully rugged offering optimized visibility with optical bonding, and comes with easy-to-use front panel control. The advanced computing platform enables faster searches and real-time information, providing rapid response capabilities.



Military Panel PC & Display

Military Series

Optional configuration



Touch



EMI ITO
Glass



Application



Military Navigation

“LARGE SCREEN
FOR DASHBOARD
VISUALIZATION.”

Winmate 42-inch display was
installed in a military vehicle
for navigation purposes.

“ COMPLETE TASKS NO
MATTER WHERE YOUR
MISSION BRINGS YOU. ”

- 4K-UHD Military Display
- Military Console Rack Panel PC & Display
- G-WIN Military Panel PC & Display



Tested MIL-STD 810-G, MIL-STD 461-F

Wide range DC power input (+9~36V)

Mounting solution for console

Military connectors MIL-DTL-38999 type I and II

Accessories

AC Adapter

Power Cable

Mounting Screws

Driver CD

Military Display

4K UHD



Model Name	27" (16:9)	32" (16:9)	40" (16:9)
	M270TF-MIL	M320TF-MIL	W40L100-MLM1FG
Display			
Resolution	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)
Brightness	300 nits, optional 700 nits	350 nits, optional 700 nits	350 nits
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)	5000:1 (Typ.)
Active Area	596.16 (H) x 335.34 (V)	708.48 (H) x 398.52 (V)	878.1 (H) x 485.3 (V)
Viewing Angle	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Display Color	1.07B (Max)	1.07B (Max)	1.07M
Touch	Projected Capacitive Multitouch (USB, Optional)	Projected Capacitive Multitouch (USB, Optional)	Projected Capacitive Multitouch (USB, Optional)
Connectors			
DVI	1 x DVI-D	1 x DVI-D	1 x DVI-D
VGA	1 x VGA	1 x VGA	1 x VGA
HDMI	1 x HDMI 1.4, 1 x HDMI 2.0	1 x HDMI 1.4, 1 x HDMI 2.0	1 x HDMI 1.4, 1 x HDMI 2.0
USB	USB for Optional Touch	USB for Optional Touch	
Serial Interfaces	RS-232 for Remote Control	RS-232 for Remote Control	
Display Port	1 x Display Port	1 x Display Portt	1 x Display Port
User Controls			
Audio	1 x Line in	1 x Line in	1 x Audio in (Optinoal)
Control Buttons	Capacitive OSD: Power On/Off, On Screen Display Menu, Brightness Control (-/+)	Capacitive OSD: Power On/Off, On Screen Display Menu, Brightness Control (-/+)	Menu/Auto-adjust/Brightness Up and Down / LED Adjustment/Power
Led Indicator	Power on, Standby	Power on, Standby	Power On/Off, Sleep
Mechanical			
Dimensions	643.17 x 408.06 x 48 mm	777.58 x 477.62 x 48 mm	978.2 x 580.4 x 88.55 mm
Cooling System	Fanless design	Fanless design	Fanless design
Mounting	VESA Mount	VESA Mount	Flush Rack/Rack Mount
Environment			
Operating Temp.	0°C to 50°C	0°C to 50°C	-20°C to 60°C
Humidity	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)
IP Rating	Front IP65, Rear IP22	Front IP65, Rear IP22	Front IP65
Power			
Power Input	+24V DC with isolation	+24V DC with isolation	AC +110~240V, +9~36V DC (Optional)
Power Consumption	90W (Typ.)	110W (Typ.)	60W (Typ.)
AC Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC ClassB
Military	MIL-STD 810F/G, MIL-STD 416E/F	MIL-STD 810F/G, MIL-STD 416E/F	MIL-STD 810F/G, MIL-STD 416E/F

Vertical Market Solutions

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Military Display

Projected Capacitive Multitouch



Model Name	15"	17"	19"
	R15L600-MLC3FP	R17L100-MLA1FP	R19L100-M2A3FP
Display			
Resolution	1024 x 768	1280 x 1024	1280 x 1024
Brightness	300 nits	350 nits	350 nits
Contrast Ratio	700:1 (Typ.)	800:1 (Typ.)	1000:1 (Typ.)
Active Area	304.1 (H) x 228.1 (V)	337.920 (H) x 270.336 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-80~80(H); -80~80(V)	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M	16.7M	16.7M
Touch	Projected Capacitive Multitouch (Optional) EMI ITO Glass (Optional)	Projected Capacitive Multitouch (Optional), EMI ITO Glass (Optional)	Projected Capacitive Multitouch (Optional), EMI ITO Glass (Optional)
Connectors			
Power	1 x AC Power input (Military grade)	1 x AC Power input (Military grade)	1 x AC Power input (Military grade)
Serial Interfaces	1 x RS-232 Touch Interface (Optional)	1 x RS-232 Touch Interface (Optional)	1 x RS-232 Touch Interface (Optional)
USB	1 x USB Touch Interface	1 x USB Touch Interface	1 x USB Touch Interface
BNC	5 x BNCs (R,G,B,H,V)	5 x BNCs (R,G,B,H,V)	5 x BNCs (R,G,B,H,V)
VGA	1 x VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D	1 x DVI-D	1 x DVI-D
User Controls			
Control Buttons	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power
Led Indicator	Power On/Off, Sleep	Power On/Off, Sleep	Power On/Off, Sleep
Mechanical			
Dimensions	402 x 321 x 70 mm	482.6 x 399.3 x 76.9 mm	482.6 x 399.3 x 76.9 mm
Mounting	Flush, Rack Mount	Flush, Rack Mount	Flush, Rack Mount
Environment			
Operating Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Humidity	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)
Shock	MIL-STD-810F/G Method 516.6/Procedure I	MIL-STD-810F/G Method 516.6/Procedure I	MIL-STD-810F/G Method 516.6/Procedure I
Vibration	MIL-STD-810F/G Method 514.6/Procedure I	MIL-STD-810F/G Method 514.6/Procedure I	MIL-STD-810F/G Method 514.6/Procedure I
IP Rating	Front IP65	Front IP65	Front IP65
Power			
Power Input	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)
Power Consumption	21W (Typ.)	32W (Typ.)	30W (Typ.)
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC
Military	MIL-STD 810F/G, MIL-STD 461E/F	MIL-STD 810F/G, MIL-STD 461E/F	MIL-STD 810F/G, MIL-STD 461E/F

Military Display

Projected Capacitive Multitouch



Model Name	23.8" (16:9)	32" (16:9)
	W24L100-MLA2FP	W32L100-MLA3FP
Display		
Resolution	1920 x 1080	1920 x 1080
Brightness	250 nits	350 nits
Contrast Ratio	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	527.04 (H) x 290.46 (V)	698.4 (H) x 392.85 (V)
Viewing Angle	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.270 (H) x 0.270 (V)	0.3637 (H) x 0.3637 (V)
Display Color	16.7M	1.07 Billion
Touch	Projected Capacitive Multitouch (Optional), EMI ITO Glass (Optional)	Projected Capacitive Multitouch (Optional), EMI ITO Glass (Optional)
Connectors		
Power	1 x AC Power input (Military grade)	1 x AC Power input (Military grade)
Serial Interfaces	1 x RS-232 Touch Interface (Optional)	1 x RS-232 Touch Interface (Optional)
USB	1 x USB Touch Interface	1 x USB Touch Interface
BNC	5 x BNCs (R,G,B,H,V)	5 x BNCs (R,G,B,H,V)
VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D	1 x DVI-D
HDMI	1 x HDMI	1 x HDMI
User Control		
Control Buttons	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power
Led Indicator	Power On/Off, Sleep	Power On/Off, Sleep
Mechanical		
Dimensions	635.2 x 430.9 x 66 mm	825 x 486 x 88.5 mm
Mounting	Flush, Rack Mount	Flush, Rack Mount
Environment		
Operating Temp.	-20°C to 60°C	-20°C to 60°C
Humidity	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)
Shock	MIL-STD-810F/G Method 516.6/Procedure I	MIL-STD-810F/G Method 516.6/Procedure I
Vibration	MIL-STD-810F/G Method 514.6/Procedure I	MIL-STD-810F/G Method 514.6/Procedure I
IP Rating	Front IP65	Front IP65
Power		
Power Input	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)
Power Consumption	25W (Typ.)	50W (Typ.)
Power Adapter	AC +110~240V, Universal, ±10%	AC +110~240V, Universal, ±10%
Certifications		
Safety	CE, FCC	CE, FCC
Military	MIL-STD 810F/G, MIL-STD 461E/F	MIL-STD 810F/G, MIL-STD 461E/F

Vertical Market Solutions

Product

Stainless

Heavy
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Marine

Military

Medical

Military Display

Resistive Touch

Vertical Market Solutions



Model Name	17"	19"	20.1"
	R17L 100-RKA1ML	R19L 100-RKA3ML	R20L 100-RKA2ML
Display			
Resolution	1280 x 1024	1280 x 1024	1600 x 1200
Brightness	350 nits	350 nits	300 nits
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)	800:1 (Typ.)
Active Area	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	408 (H) x 306 (V)
Viewing Angle	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.264 (H) x 0.264 (V)	0.294 (H) x 0.294 (V)	0.255 (H) x 0.255 (V)
Display Color	16.7M colors	16.7M colors	16.7 Million (8 bits/colors)
Touch	5-wire Resistive Touch (Optional), 5-wire Resistive Touch with EMI Mesh Coating (Optional), EMI ITO Glass (Optional)	5-wire Resistive Touch (Optional), 5-wire Resistive Touch with EMI Mesh Coating (Optional), EMI ITO Glass (Optional)	5-wire Resistive Touch (Optional), 5-wire Resistive Touch with EMI Mesh Coating (Optional), EMI ITO Glass (Optional)
Connectors			
Power	1 x AC Power input (Military grade)	1 x AC Power input (Military grade)	1 x AC Power input (Military grade)
Serial Interfaces	1 x RS-232 Touch Interface (Optional)	1 x RS-232 Touch Interface (Optional)	1 x RS-232 Touch Interface (Optional)
BNC	5 x BNCs (R,G,B,H,V)	5 x BNCs (R,G,B,H,V)	5 x BNCs (R,G,B,H,V)
VGA	1 x VGA	1 x VGA	1 x VGA
DVI	1 x DVI-D	1 x DVI-D	1 x DVI-D
User Controls			
Control Buttons	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power
Led Indicator	Power On/Off, Sleep	Power On/Off, Sleep	Power On/Off, Sleep
Mechanical			
Dimensions	340 x 399.3 x 79.6 mm	482.6 x 399.3 x 76.9 mm	482.6 x 399.4 x 85 mm
Mounting	Flush, Rack Mount	Flush, Rack Mount	Flush, Rack Mount
Environment			
Operating Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Humidity	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)
Shock	MIL-STD-810F/G Method 516.6/Procedure I	MIL-STD-810F/G Method 516.6/Procedure I	MIL-STD-810F/G Method 516.6/Procedure I
Vibration	MIL-STD-810F/G Method 514.6/Procedure I	MIL-STD-810F/G Method 514.6/Procedure I	MIL-STD-810F/G Method 514.6/Procedure I
IP Rating	Front IP65	Front IP65	Front IP65
Power			
Power Input	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)
Power Consumption	32W (Typ.)	30W (Typ.)	50W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC
Military	MIL-STD 810F/G, MIL-STD 461E/F	MIL-STD 810F/G, MIL-STD 461E/F	MIL-STD 810F/G, MIL-STD 461E/F

Product

Stainless

Heavy
Duty

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Marine

Military

Medical

Military Display

Resistive Touch



Model Name	24" (16:10)	32" (16:9)
	W24L100-RKS1ML	W32L100-RKA3ML
Display		
Resolution	1920 x 1200	1920 x 1080
Brightness	300 nits	350 nits
Contrast Ratio	1000:1 (Typ.)	3000:1 (Typ.)
Active Area	518.4 (H) x 324 (V)	698.4 (H) x 392.85 (V)
Viewing Angle	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Pixel Pitch	0.270 (H) x 0.270 (V)	0.3637 (H) x 0.3637 (V)
Display Color	16.7M colors	16.7M colors
Touch	5-wire Resistive Touch (Optional), 5-wire Resistive Touch with EMI Mesh Coating (Optional), EMI ITO Glass (Optional)	5-wire Resistive Touch (Optional), 5-wire Resistive Touch with EMI Mesh Coating (Optional), EMI ITO Glass (Optional)
Connectors		
Power	1 x AC Power input (Military grade)	1 x AC Power input (Military grade)
Serial Interfaces	1 x RS-232 Touch Interface (Optional)	1 x RS-232 Touch Interface (Optional)
BNC	5 x BNCs (R,G,B,H,V)	5 x BNCs (R,G,B,H,V)
VGA	1 x VGA	1 x VGA
DVI-D	1 x DVI-D	1 x DVI-D
User Controls		
Control Buttons	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power	Menu, Auto-adjust, Brightness Up and Down, LED Adjustment, Power
Led indicator	Power On/Off, Sleep	Power On/Off, Sleep
Mechanical		
Dimensions	609.5 x 399.3 x 76.2 mm	609.5 x 399.3 x 76.2 mm
Mounting	Flush, Rack Mount	Flush, Rack Mount
Environment		
Operating Temp.	-20°C to 60°C	0°C to 50°C, Optional -15°C to 50°C
Humidity	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)
Shock	MIL-STD-810F/G Method 516.6/Procedure I	MIL-STD-810F/G Method 516.6/Procedure I
Vibration	MIL-STD-810F/G Method 514.6/Procedure I	MIL-STD-810F/G Method 514.5
IP Rating	Front IP65	Front IP65, Back Side I/O IP22
Power		
Power Input	AC +110~240V, Universal, ±10%; DC +9~36V, ±10% (Optional)	220V ±10%, 50 ± 3% Hz
Power Consumption	26W (Typ.)	50W (Typ.)
Certifications		
Safety	CE, FCC	CE, FCC
Military	MIL-STD 810F/G, MIL-STD 461E/F	MIL-STD 810F/G, MIL-STD 461E/F

Vertical Market Solutions

Product

Stainless

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Marine

Military

Medical

Military Panel PC

Intel® Core™ i7 4650U



Model Name	17"	19"	24" (16:10)
	R17IH3S-MLA1-89	R19IH3S-MLA3-89	W24IH3S-MLS1-89
Display			
Resolution	1280 x 1024	1280 x 1024	1920 x 1200
Brightness	350 nits	350 nits	300 nits
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)	1000:1 (Typ.)
Active Area	337.92 (H) x 270.34 (V)	376.32 (H) x 301.06 (V)	518.4 (H) x 324 (V)
Viewing Angle	-85~85 (H); -80~80 (V)	-85~85 (H); -80~80 (V)	-89~89 (H); -89~89 (V)
Display Color	16.7M (6bits+FRC)	16.7M	16.7M
System			
Processor	Intel® Core™ i7 4650U, 1.7GHz	Intel® Core™ i7 4650U, 1.7GHz	Intel® Core™ i7 4650U, 1.7GHz
BIOS	AMI 16 Mbit Flash	AMI 16 Mbit Flash	AMI 16 Mbit Flash
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated
Memory	1 x SO-DIMM DDR3L 1600, Default 4GB	1 x SO-DIMM DDR3L 1600, Default 4GB	1 x SO-DIMM DDR3L 1600, Default 4GB
Storage	mSATA SSD, Default 64GB (Up to 256GB)	mSATA SSD, Default 64GB (Up to 256GB)	mSATA SSD, Default 64GB (Up to 256GB)
Ethernet Controller	Intel® Ethernet Controller 1211-AT +, Intel® Gigabit Etherne PHY 1218-LM	Intel® Ethernet Controller 1211-AT +, Intel® Gigabit Etherne PHY 1218-LM	Intel® Ethernet Controller 1211-AT +, Intel® Gigabit Etherne PHY 1218-LM
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Windows Embedded Standard 7
Connectors			
Power	1 x Power Input (MIL-DTL-38999/1)	1 x Power Input (MIL-DTL-38999/1)	1 x Power Input (MIL-DTL-38999/1)
Ethernet	1 x LAN (MIL-DTL-38999/3)	1 x LAN (MIL-DTL-38999/3)	1 x LAN (MIL-DTL-38999/3)
Serial Interfaces	1 x RS-232 (MIL-DTL-38999/3)	1 x RS-232 (MIL-DTL-38999/3)	1 x RS-232 (MIL-DTL-38999/3)
USB	1 x USB A Type (MIL-DTL-38999/3)	1 x USB A Type (MIL-DTL-38999/3)	1 x USB A Type (MIL-DTL-38999/3)
VGA	1 x VGA (MIL-DTL-38999/3)	1 x VGA (MIL-DTL-38999/3)	1 x VGA (MIL-DTL-38999/3)
Mechanical			
Dimensions	340 x 399.3 x 79.6 mm	482.6 x 399.3 x 76.9 mm	609.5 x 399.3 x 76.2 mm
Cooling System	Fanless design	Fanless design	Fanless design
Mounting	Rack Mount	Rack Mount	Rack Mount
User Controls			
Control Buttons	Menu/Auto-adjust/Brightness Up and Down/LED Adjustment/Power	Menu/Auto-adjust/Brightness Up and Down/LED Adjustment/Power	Menu/Auto-adjust/Brightness Up and Down/LED Adjustment/Power
LED Indicator	Power On/Off, Sleep	Power On/Off, Sleep	Power On/Off, Sleep
Environment			
Operating Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Humidity	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)	95% ±3% (Non-condensing, RH)
Shock	MIL-STD-810F/G Method 516.6/ Procedure I	MIL-STD-810F/G Method 516.6/ Procedure I	MIL-STD-810F/G Method 516.6/ Procedure I
Vibration	MIL-STD-810F/G Method 514.6/ Procedure I	MIL-STD-810F/G Method 514.6/ Procedure I	MIL-STD-810F/G Method 514.6/ Procedure I
IP Rating	Front IP65	Front IP65	Front IP65
Power			
Power Input	Default AC +110~240V , Optional isolation +9~36V DC	Default AC +110~240V , Optional isolation +9~36V DC	Default AC +110~240V , Optional isolation +9~36V DC
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

G-WIN Military

Overview

The Winmate rugged panel PC is a product series that we call G-WIN. With the G-WIN series, Winmate extends our product line by offering a rugged panel pc product that combines low power consumption with a modern wide-format, higher resolution touch display. G-WIN panels can be mounted in heavy-duty vehicles through standard VESA mount brackets or special vehicle mount solutions and are suitable for a very wide range of industrial and military applications.

The Winmate G-WIN is a rugged vehicle or stationary-mount computer. It features an ignition on/off delay for precise vehicle power, and offers a super-solid and highly configurable rugged exterior, exceptionally well suited for harsh environments on heavy duty military vehicles, forklifts, and warehouse mounting. The G-WIN features wide-range power input (6-60 volts) and operates on vehicle power, eliminating the need to recharge batteries. The ignition on/off delay is fully customizable with an automatic shut off ranging from approximately 1 to 120 seconds.



Product

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Optional configuration



Mounting
Bracket



Transflective
Film



Wi-Fi

Military Panel PC & Display

G-WIN Military Series



Application



In-Vehicle Monitoring

“RUGGED & DURABLE.”

Winmate 8.4 and 10.4-inch display was installed in a military vehicle for monitoring and control applications.

“ **RUGGED DESIGN FOR ARMORED VEHICLES.** ”

- 8.4~19-inch Military Panel PC & Display
- Vehicle Mount Design
- Vibration Resistant



Tested MIL-STD 810-G, MIL-STD 461-F

Wide range DC power input (+9~36V)

Mounting solution for console

Aluminum housing with anti-corrosion treatment

Military grade power connector MIL-DTL-38999 type I

Accessories

AC Adapter

Power Cable

Mounting Screws

Driver CD

G-WIN Military Display



Model Name	8.4"	10"	10"
	R08L100-MLU1	R10L100-MLT2	R10L100-MLP1
Display			
Resolution	800 x 600	1024 x 768	800 x 600
Brightness	600 nits	350 nits	400 nits
Contrast Ratio	600:1 (Typ.)	1200:1 (Typ.)	500:1 (Typ.)
Active Area	170.4 (H) x 127.8 (V)	210.4 (H) x 157.8 (V)	211.2 (H) x 158.4 (V)
Viewing Angle	-75~75 (H); -60~70 (V)	-88~88 (H); -88~88 (V)	-70~70 (H); -55~65 (V)
Display Color	16.2M	16.2M	16.2M
Touch	4 Wire Resistive (Default), 5 Wire Resistive (Optional)	4 Wire Resistive (Default), 5 Wire Resistive (Optional)	4 Wire Resistive (Default), 5 Wire Resistive (Optional)
Connectors			
Power	1 x Military Grade Lockable (MS27467T9F98S) Power Connector	1 x Military Grade Lockable (MS27467T9F98S) Power Connector	1 x Military Grade Lockable (MS27467T9F98S) Power Connector
VGA	1 x VGA (DB-15)	1 x VGA (DB-15)	1 x VGA (DB-15)
RS-232	1 x RS-232 for Touch Screen (Optional with touch)	1 x RS-232 for Touch Screen (Optional with touch)	1 x RS-232 for Touch Screen (Optional with touch)
DVI	1 x DVI-D	1 x DVI-D	1 x DVI-D
User Controls			
Control Buttons	Menu, Enter Button, Auto-adjust, Esc Button, Brightness Up, Increase Button, Brightness Down, Decrease Button, Display Power Button	Menu, Enter Button, Auto-adjust, Esc Button, Brightness Up, Increase Button, Brightness Down, Decrease Button, Display Power Button	Menu, Enter Button, Auto-adjust, Esc Button, Brightness Up, Increase Button, Brightness Down, Decrease Button, Display Power Button
LED Indicator	Power On/Off, Sleep	Power On/Off, Sleep	Power On/Off, Sleep
Mechanical			
Dimensions	277 x 219.5 x 59.7 mm	315x 250 x 67 mm	315x 250 x 67 mm
Mounting	VESA mount, Vehicle mount	VESA mount, Vehicle mount	VESA mount, Vehicle mount
Housing	Aluminum Housing with Anti-Corrosion Treatments	Aluminum Housing with Anti-Corrosion Treatments	Aluminum Housing with Anti-Corrosion Treatments
Environment			
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Shock	Operating: 30g for 18ms, 300m/s ²	Operating: 30g for 18ms, 300m/s ²	Operating: 30g for 18ms, 300m/s ²
Vibration	Operating: 1.60/1.96/2.18 grms for XYZ/5-500Hz	Operating: 1.60/1.96/2.18 grms for XYZ/5-500Hz	Operating: 1.60/1.96/2.18 grms for XYZ/5-500Hz
IP Rating	Full IP65 Dust/water resistant Protection (Except I/O parts)	Full IP65 Dust/water resistant Protection (Except I/O parts)	Full IP65 Dust/water resistant Protection (Except I/O parts)
Power			
Power Input	+12V DC	+12V DC	+12V DC
Power Consumption	15W (Typ.)	22W (Typ.)	24W (Typ.)
Certifications			
Safety	CE, FCC	CE, FCC	CE, FCC
Military	MIL810F/IEC60068-2-27 for Vibration/Shock	MIL810F/IEC60068-2-27 for Vibration/Shock	MIL810F/IEC60068-2-27 for Vibration/Shock

Product

Stainless

Heavy
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Marine

Military

Medical

G-WIN Military Display



Model Name	15"	19"
	R15L100-MLC3HB	R19L100-MLM1
Display		
Resolution	1024 x 768	1280 x 1024
Brightness	800 nits	400 nits
Contrast Ratio	700:1 (Typ.)	1000:1 (Typ.)
Active Area	304.128 (H) x 228.096 (V)	376.32 (H) x 301.06 (V)
Viewing Angle	-80~80 (H); -60~80 (V)	-85~85 (H); -80~80 (V)
Display Color	16.2M	16.7M
Touch	5 Wire Resistive Touchscreen	AR Glass (Default), ELO 5 Wire Resistive Touch (Optional)
Connectors		
Power	1 x Military Grade Lockable (MS27467T9F98S) Power Connector	1 x Military Grade Lockable (MS27467T9F98S) Power Connector
VGA	1 x VGA (DB-15)	1 x VGA (DB-15)
RS-232	1 x RS-232 for Touch Screen (Optional with touch)	1 x RS-232 for Touch Screen (Optional with touch)
DVI	1 x DVI-D	1 x DVI-D
User Controls		
Control Buttons	Menu, Enter Button, Auto-adjust, Esc Button, Brightness Up, Increase Button, Brightness Down, Decrease Button, Power Button	Menu, Enter Button, Auto-adjust, Esc Button, Brightness Up, Increase Button, Brightness Down, Decrease Button, Power Button
LED Indicator	Power On/Off, Sleep	Power On/Off, Sleep
Mechanical		
Dimensions	398 x 308 x 58 mm	474 x 410 x 143.5 mm
Mounting	VESA mount, Vehicle mount	VESA mount, Vehicle mount
Housing	Aluminum Housing with Anti-Corrosion Treatments	Aluminum Housing with Anti-Corrosion Treatments
Environment		
Operating Temp.	-10°C to 55°C	-40°C to 70°C (With intelligent heater control design)
Humidity	10% to 95% (Non-condensing, RH)	5% to 95% (Non-condensing, RH)
Shock	Operating: 40g for 11ms	Method 516.6 Procedure I
Vibration	Operating: 1.62/2.02/2.20 grms for XYZ/5-500Hz	Method 514.6 Procedure I
IP Rating	Full IP65 Dust/water resistant Protection (Except I/O parts)	Full IP65 Dust/water resistant Protection (Except I/O parts)
Power		
Power Input	+12V DC	+9~36V DC with isolation
Power Consumption	35W (Typ.)	45W (Typ.)
Certifications		
Safety	CE, FCC	CE, FCC
Military	MIL-STD 810F for Vibration /Shock	MIL-STD-810F/G for Operating Temperature, Shock, Vibration MIL-STD-461E

G-WIN Military Panel PC

Intel® Celeron® N2930 Bay Trail-M



Model Name	8"	10"	15"
	R08IB3S-MLU1	R10IB3S-MLT2	R15IB3S-MLC3HB
Display			
Resolution	800 x 600	1024 x 768	1024 x 768
Brightness	450 nits	350 nits	1000 nits
Contrast Ratio	600:1 (Typ.)	1200:1 (Typ.)	700:1 (Typ.)
Active Area	170.4 (H) x 127.8 (V)	210.4 (H) x 157.8 (V)	304.1 (H) x 228.1 (V)
Viewing Angle	-75~75 (H); -60~70 (V)	-88~88 (H); -88~88 (V)	-80~80 (H); -70~70 (V)
Display Color	262,144 (6bits/color)	16.2M	16.2M
System			
Processor	Intel® Celeron® N2930, 1.83GHz	Intel® Celeron® N2930, 1.83GHz	Intel® Celeron® N2930, 1.83GHz
BIOS	AMI 16 Mbit	AMI 16 Mbit	AMI 16 Mbit
Chipset	Intel® SoC Integrated	Intel® SoC Integrated	Intel® SoC Integrated
Memory	1 x DDR3L 1600MHz SO-DIMM (Default 4GB, max.8GB)	1 x DDR3L 1600 MHz SO-DIMM (Default 4GB, max.8GB)	1 x DDR3L 10600 MHz SO-DIMM (Default 4GB, max. 8GB)
Ethernet Controller	Intel® WG82574L GbE	Intel® WG82574L GbE	Intel® WG82574L GbE
Storage	mSATA SSD (Default 64GB)	mSATA SSD (Default 64GB)	mSATA SSD (Default 64GB)
Expansion Slot	1 x Mini PCIe for wireless	1 x Mini PCIe for wireless	1 x Mini PCIe for wireless
OS	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7	Windows 10 IoT Enterprise Windows Embedded 8.1 Industry Pro Windows 7 Pro for Embedded Systems Windows Embedded Standard 7
Connectors			
Power	1 x Military Grade Lockable (MS27467T9F98S) Power	1 x Military Grade Lockable (MS27467T9F98S) Power	1 x Military Grade Lockable (MS27467T9F98S) Power
Ethernet	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)	2 x RJ45 (10/100/1000 Mbps)
Serial Interfaces	1 x RS-232/422/485 WLAN antenna SMA in top (Optional)	1 x RS-232/422/485 WLAN antenna SMA in top (Optional)	1 x RS-232/422/485 WLAN antenna SMA in top (Optional)
USB	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0	1 x USB 2.0, 1 x USB 3.0
HDMI	1 x HDMI	1 x HDMI	1 x HDMI
User Controls			
Control Buttons	Power On/Off, Reset, Brightness Up, Brightness Down	Power On/Off, Reset, Brightness Up, Brightness Down	Power On/Off, Reset, Brightness Up, Brightness Down
LED Indicator	Power On/Off, HDD Status	Power On/Off, HDD Status	Power On/Off, HDD Status
Mechanical			
Dimensions	277 x 219.5 x 59.7 mm	315 x 250 x 67 mm	398 x 308 x 58 mm
Mounting	VESA Mount, Vehicle Mount	VESA Mount, Vehicle Mount	VESA Mount, Vehicle Mount
Environment			
Operating Temp.	-10°C to 55°C	-10°C to 55°C	-10°C to 55°C
Humidity	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)	10% to 95% (Non-condensing, RH)
Shock	Operating: 30g for 18ms, 300m/s2	Operating: 30g for 18ms, 300m/s2	Operating: 40g for 11ms
Vibration	Operating: 1.60/1.96/2.18 grms for XYZ/5-500Hz	Operating: 1.60/1.96/2.18 grms for XYZ/5-500Hz	Operating: 1.60/1.96/2.18 grms for XYZ/5-500Hz
Power			
Power Input	+12V DC	+12V DC	+12V DC
Certifications			
Safety	CE, FCC Class B	CE, FCC Class B	CE, FCC Class B
Military	MIL-STD-810F/G, IEC60068-2-27 for Vibration /Shock	MIL-STD-810F/G, IEC60068-2-27 for Vibration /Shock	MIL-STD-810F/G, IEC60068-2-27 for Vibration /Shock

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical

Medical

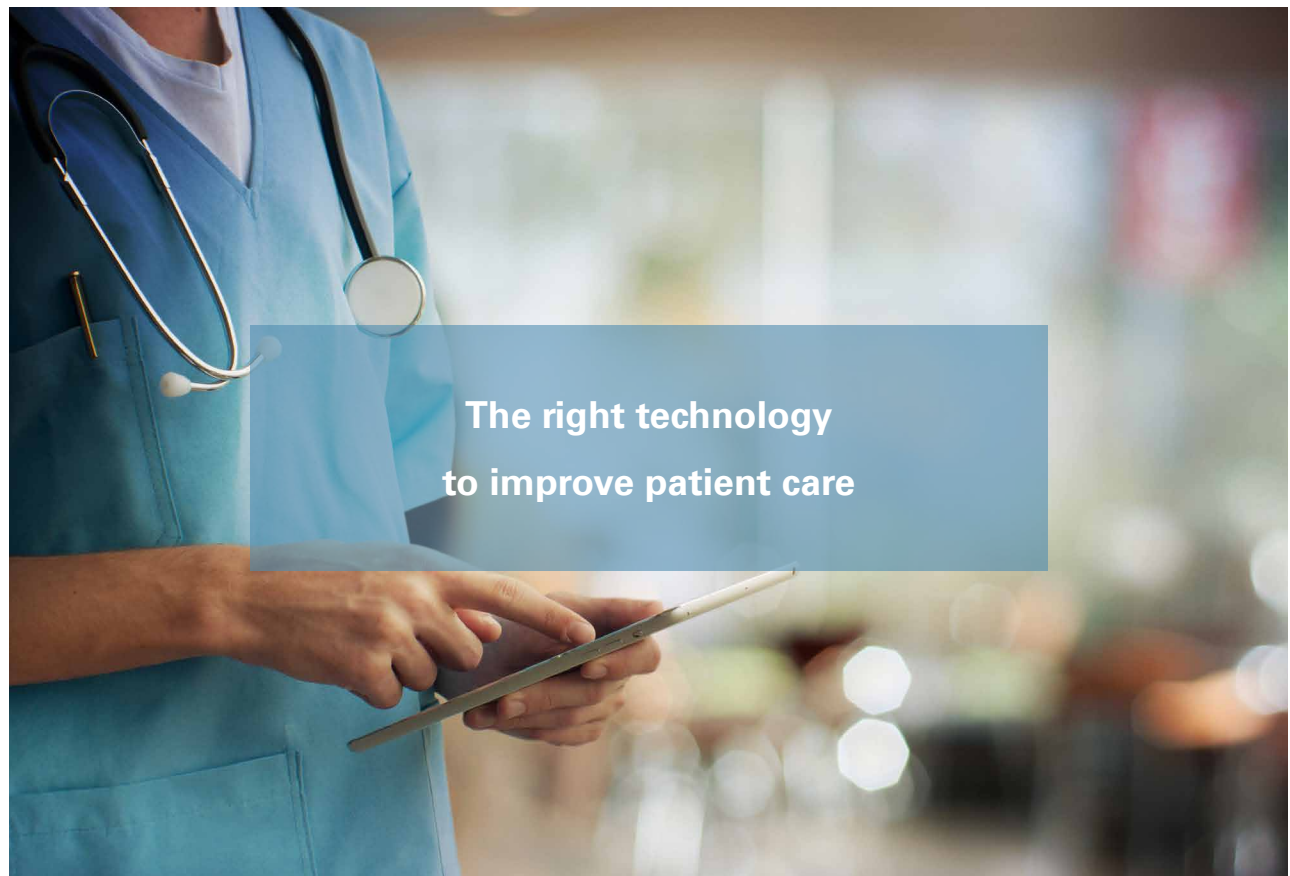
Overview

Technology has long played an imperative role in streamlining hospital operations and improving patient care. In hospital environments, performance, reliable and accurate image reproduction are imperative. From medical images to patient data, the hospital environment is a complex ecosystem that requires advanced technology to keep it running smoothly.

Our medical solutions include:

- Surgical and clinical display
- Medical tablet computer
- Durable design and the latest operating systems

Expand your medical and healthcare business with the Winmate. As a technology solutions leader, Winmate values our partners. As a partner, you are a vital instrument in ensuring the customer needs are understood and that their expectations are exceeded every time. Our commitment to you and our passion for working as a team to create mutual success is the reason we have created a solid partnership program that works.



The right technology
to improve patient care

Technology

Certification & Quality Approvals

Winmate developed and implemented a quality management system based on a process management approach which has demonstrate its ability to provide consistent products that meet customer and applicable regulatory requirements, and to address customer satisfaction through the effective application of the system, including continual improvement and the prevention of non-conformity. The quality system complies with the international standard ISO 9001:2008 and the standards which apply to related industries



Winmate achieved ISO 13485:2016 and EN ISO 13485:2016 certification for its' design, development, production, installation, and servicing of medical devices. What does this mean for you? Winmate's certification confirms any portable panel PCs and mobile tablets we develop for use in the medical industry are safe and meet all regulatory design requirements.

This achievement will also enable Winmate to expand its medical-related product line, and create new opportunities for our original design manufacturer (ODM), original equipment manufacturer (OEM), and rebranding partners.

4.3~13.3" Mobile Computer and Tablet

Medical Series

Custom configuration

4G

4G LTE

3G

3G

Barcode
ReaderHR RFID
Reader

Application



Patient Monitoring

"INSTANTLY ACCESS AND
KEEP PATIENT RECORDS."

Winmate 10.1-inch medical
tablet was installed in front of
hospital bed for monitoring.

**“ DROP RESISTANT.
MOBILE. RUGGED. ”**

- 4.3~7-inch Mobile Computer
- 10.1/13.3-inch Tablet
- Certified ISO 13485:2016



ISO 13485 certificates

Wi-Fi, Bluetooth

GPS

IP65 water and dust proof

High flexibility for customized requests

-10~50°C operating temperature

Accessories

AC Adapter

Power Cable

Desk Dock

Vehicle Dock

Carry Bag/Handstrap

Medical Mobile Computer

Arm® Cortex®-A53 Quad-core



Model Name	4.3" E430RM4L-ME	5" E500RM8-ME	7" M700DM8-ME
Display			
Resolution	480 x 800	1280 x 720	1280 x 720
Brightness	400 nits	500 nits	650 nits
Contrast Ratio	800:1 (Typ.)	800:1 (Typ.)	500:1 (Typ.)
Touch	Projected Capacitive Multitouch	Projected Capacitive Multitouch	Projected Capacitive Multitouch
Sensors	Light Sensor, Proximity Sensor, G-sensor, Digital Compass	Light Sensor, Proximity Sensor, G-sensor, Digital Compass	G-Sensor, Light Sensor
System			
Processor	Arm® Cortex®-A53 Quad-core 1.3GHz	Arm® Cortex®-A53 Octa-core 1.3GHz	Arm® Cortex®-A53 Octa-core 1.3GHz
Memory	1GB SDRAM	2GB SDRAM	2GB Mobile DDR2
Storage	8GB eMMC (Optional to 32GB, MOQ:1K), External Micro SD Card (Up to 32G)	16GB eMMC	16GB eMMC
OS	Android 5.1	Android 7.0	Android 7.0
Wireless Communications			
WLAN	802.11 a/b/g/n	802.11 a/b/g/n	802.11 a/b/g/n
Bluetooth	Bluetooth 4.0	Bluetooth 4.0	Bluetooth 4.0, Support BLE mode + wide-band speech
GPS	Built-in GPS module	Built-in GPS module	Built-in GPS module
Connectors			
External I/O	1 x SIM card slot, 1 x Micro SD card slot, 1 x Micro USB, 1 x Pogo Pin For charging	2 x SIM card slot, 1 x Micro SD card slot, 1 x Micro USB, 1x Power Jack, 1 x Docking Connector	1 x Micro USB OTG, 1 x Headset jack (Mic+Earphone), 1 x 2.5Ø 5V DC Power Input, 1 x SIM Slot, 2 x Microphones, 1 x Micro SD Card Slot
User Controls			
Control Buttons	1 x Volume - +, 1 x Power button, 1 x Function button 4 x Capacitive buttons:Home/ Menu/ESC/Search functions	1 x Volume - +, 1 x Power button, 2 x Function button, 4 x Front Key	1 x Power Button, 2 x Volume Key, 1 x Home, 1 x Menu, 1 x Return, 1 x Search
LED Indicator	1 x LED indicator	1 x LED indicator	Power/Battery indicator
Audio	1 x Built-in Mic, 1 x Earphone, 1 x 1.2W Speaker	2 x Built-in Mic, 1 x Earphone, 1 x 1.2W Speaker	1 x 1.2W Speaker
Mechanical			
Dimensions	132.57 x 81.87 x 27.4 mm	85.9 x 163.2 x 22.5 mm	212.4 x 132.8 x 19 mm
Net Weight	260g	315g	550g
Operating Temp.	-20°C to 60°C (AC Mode) -10°C to 50°C (Battery Mode)	-20°C to 60°C (AC Mode) -10°C to 50°C (Battery Mode)	-20°C to 60°C (AC Mode), -10°C to 50°C (Battery Mode)
Humidity	10%~95% (Non-condensing, RH)	10%~95% (Non-condensing, RH)	5%~95% (Non-condensing, RH)
IP Proof	IP65	IP65	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.6 Procedure I	MIL-STD-810G Method 516.5
Vibration	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.6 Procedure I	MIL-STD-810G Method 514.5
Drop	MIL-STD-810G Method 516.6, 4 ft, Free to concrete	MIL-STD-810G Method 516.6, 4 ft, Free to concrete	MIL-STD-810G Method 516.5 4 ft, Free to concrete
Power			
AC Adapter	5V/1A, USB Adapter	5V 2A Adapter	100-240V, 50-60Hz, 5VDC
Battery	3.7V 3900mAh Li-poly removable battery	3.7V 3900mAh Li-ion removable battery	Li-Polymer Battery 5300 mAh
Battery Operating Time	20 Hrs	20 hrs	20 hrs
Data Capture			
Barcode	Motorola SE4500 1D/2D Barcode Reader	1D/2D Barcode Reader	Motorola SE4500 1D/2D Barcode Reader
NFC	NFC (Read/Write, Peer to Peer mode)	NFC (Read/Write, Peer to Peer mode)	NFC (Read/Write, Peer to Peer mode)
Camera	Rear: 8 MP Camera with LED auxiliary light with autofocus Front: 2 MP Camera	Rear: 8 MP Camera with LED auxiliary light with autofocus Front: 2 MP Camera	Rear: 5 Mega-Pixel Camera with LED auxiliary light with autofocus Front: 2 Mega-Pixel Camera
Certifications			
Safety	CE, FCC, CCC	CE, FCC, CCC	CE, FCC, CCC

Vertical Market Solutions

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

Medical Tablet

Intel® Pentium® N4200



Model Name	10.1" M101P-ME
Display	
Resolution	1920 x 1200
Brightness	800 nits
Contrast Ratio	600:1 (Typ.)
Touch	Projected Capacitive Multitouch
Sensors	Light sensor, G sensor, Gyro, E-compass
System	
Processor	Intel® Pentium® N4200, 1.1 GHz
Memory	4GB SODIMM DDR3L-1600 (Up to 8GB)
Storage	64GB solid state drive (SSD) Optional up to 512GB
Wireless Communications	
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 5.0
GNSS	GPS, GLONASS
Connectors	
External I/O	1 x Micro HDMI (Optional), 1 x USB 3.0, 1 x Audio Combo Conn (Mic in/Lin out), 1 x Power Jack, 1 x Micro SD Slot, 1 x USB 3.0 type C
Control Buttons	On-screen QWERTY keyboard Button 1 x power, 1 x Home, 2 x volume key, 2 x function key (Programmable function key configured by Hottab Utility)
LED Indicator	Power, Battery, HDD, RF
Audio	1 x Audio Combo connector (Mic in or Line Out)
Mechanical	
Dimensions	271.8 x 197.2 x 19 mm (10.7 x 7.76 x 0.75 inches)
Net Weight	1.2 kg (2.7 lbs) with standard battery, 1.4 kg (3.1 lbs) with optional high capacity battery
Housing	Rugged housing enhanced with antimicrobial properties
Operating Temp.	0°C to 35°C
Humidity	10% to 90% (Non-condensing, RH)
IP Rating	IP65 certified, Dustproof and waterproof
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete
Power	
Power Input	+12~19V DC
Battery	7.4V, typ. 5140 mAh Li-Polymer Battery (2S1P) 7.4V, typ. 10280 mAh Li-Polymer Battery (2S2P, optional)
Battery Operating Time	Std. Battery: 8 hours
Adapter	+100~240V, 50-60Hz/19V DC
Data Capture	
Camera	8MP with autofocus camera with LED flash at rear 2MP camera at front
RFID	HF RFID reader 13.56 MHz (Optional)
Barcode	1D/2D Barcode Reader (Optional)
Certifications	
Safety	CE, FCC
Medical	IEC 60601-1, IEC 60601-1-2, EN 60601-1, ANSI/AAMI ES 60601-1

Medical Tablet

Intel® Core™ i5-5200U



Model Name	13.3" M133W-ME
Display	
Resolution	1920 x 1080
Brightness	350 nits
Contrast Ratio	800:1 (Typ.)
Touch	Projected Capacitive Multitouch
Sensors	Light sensor, G sensor, Gyro, E-compass
System	
Processor	Intel® Core™ i5-5200U Broadwell, 2.2GHz (Turbo to 2.7GHz)
Memory	4GB SODIMM DDR3L-1600 (Up to 16GB)
Storage	1 x 128GB M.2 MLC SSD (Up to 1TB with 2 x SSD), 2 x Internal M.2 slots
Wireless Communications	
WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.0
GNSS	u-Blox NEO-6Q
Connectors	
External I/O	1 x HDMI, 1 x RJ45-10/100/1000 Mbps LAN, 1 x Serial Com Port, 2 x USB 3.0, 2 x USB 2.0, 1 x Headphone Combo, 1x Power (DC in), 1 x Docking Connector, 1 x SD Card Slot, 1 x Service Windows (Access to 2 x M.2 SSD cards and 1 x mini PCI-e WWAN card), 1 x Optional Expansion Window (Smart Card Reader/UHF Reader)
Control Buttons	1 x Power, 1 x Menu, 1 x Fn1, 1 x Fn2, 1 x Fn3, 2 x Volume Key (7 membrane keys)
LED Indicator	Power, Battery, RF, SSD
Audio	1 x Built-in Digital Mic with Noise Cancellation, 2 x 1W Speaker
Mechanical	
Dimensions	338.2 x 240 x 30 mm (13.3 x 9.4 x 1.18 inches)
Net Weight	2.4 Kg (Without Kickstand), 2.8 Kg (With Kickstand)
Operating Temp.	-10°C to 50°C
Humidity	30% to 80% RH, (Non-condensing, RH)
IP Rating	IP65
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure
Drop	MIL-STD-810G Method 516.6, 4 ft to concrete
Power	
Power Input	+100~240V, 50-60Hz, +19V DC
Battery	7.4V, 10280 mAh (Typ.) Li-Polymer Battery (2S2P), Optional Hot-Swappable
Battery Operating Time	11 Hours (BAPCo TabletMark v3)
Adapter	+100~240V, 50-60Hz, +19V DC
Data Capture	
Camera	5MP with autofocus camera with LED flash at rear 2MP camera at front
RFID	HF RFID 13.56MHz reader (ISO15693, ISO14443A, ISO18092)
Barcode	1D/2D Barcode Reader
Certifications	
Safety	CE, FCC, IC, UL

Vertical Market Solutions

Product

Stainless

Heavy
Duty

HazLoc

Marine

Military

Medical

15.6" Medical Display

Chassis Series

Custom configuration



Application



Diagnosis & Clinical Review

"SHARP & BRIGHT IMAGES."

Winmate 15.6-inch medical display allow monitoring patient information and support various mounting options.



**“ FOR MEDICAL IMAGING
AND CLINICAL DATA
VIZUALISAION. ”**

- 15.6-inch, 1920 x 1080 screen
- Projected capacitive touch
- Certified ISO 13485:2012



IEC 60601-1:2005, IEC 60601-1-6:2010, EN60601-1-2 Ed.4.0

Touch interface USB

VGA, HDMI video input

VESA mount

IP65 water and dust proof

0~50°C operating temperature

Accessories

AC Adapter

HDMI Cable

VGA Cable

USB Cable for Touch

Medical Chassis Display

Projected Capacitive Multitouch



Model Name	15.6" (16:9)
	W15L100-PTA3-ME
Display	
Resolution	1920 x 1080
Brightness	300 nits
Contrast Ratio	700 : 1 (Typ.)
Viewing Angle	-85~85 (H); -85~85 (V)
Max Colors	16.2M
Touch	Projected Capacitive Multitouch
Connectors	
VGA	1 x VGA
HDMI	1 x HDMI
USB	1 x USB for touch
Audio	
Audio Input	1 x Audio
OSD Membrane	Buttons at rear side
Speaker	2 x 1 Watt speaker
Mechanical	
Dimensions	387.8 x 232.9 x 384 mm
Mounting	VESA Mount (75 x 75, 100 x 200 mm)
Housing	Back cover color White, Plastic housing
Environment	
Operating Temp.	0°C to 50°C
LCD Panel Lifetime	50,000 hours
Power	
Power Input	+12V DC 2.5 mm
Power Consumption	10W (Typ.)
AC Adapter	External AC to DC Adapter. Complies with Level V1 efficiency standard
Certifications	
Safety	• RoHS-2, REACH, WEEE compliant • EN55032/EN55024, FCC part 15B
Medical	• IEC 60601-1:2005 + A1:2015 (Ed. 3.1) • IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1) • IEC 62366:2007 + A1:2014 (Ed. 1.1) • ANSI/AAMI ES60601-1:2005/ A1:2012 and C1:2009/(R)2012 and A2:2010/(R)2012 • CAN/CSA-C22.2 No.60601-1:14 • EN60601-1-2 (Ed. 4.0) • EN60950-1

Vertical Market Solutions

Product

Stainless

Heavy
Duty

HazLoc

Marine

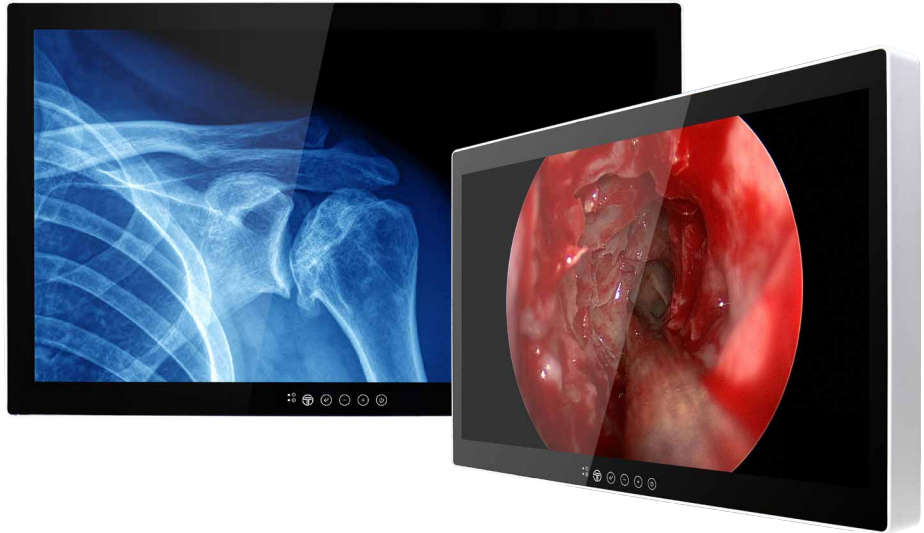
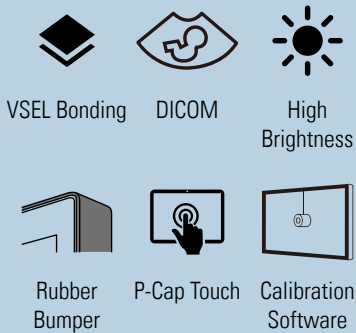
Military

Medical

27/32" Medical Display

4K UHD Series

Applications



Application



Fluoroscopy Display

“PICTURE-IN-PICTURE FUNCTION FOR DIAGNOSTIC INTERPRETATION.”

Real-time imaging during a fluoroscopy procedure enables surgeons to confirm diagnoses in many areas of the body including bones, joints, muscles, as well as digestive, and reproductive systems.

“ ACCURATE DEPICTION OF CRITICAL DETAILS.” ”

- 27/32-inch, 3840 x 2160 screen
- Certified ISO 13485:2012



IEC 60601, EN60950-1

ANSI/AAMI ES60601, IEC 62366

3G SDI in/out

HDMI 2.0, HDMI 1.4, VGA, DP 1.2, DVI

3D LUT color scheme

Backlight sensor, ambient light sensor

IR control

Antimicrobial surface coating

VESA mount

Front IP65 water and dust proof

0~35°C operating temperature

Accessories

AC Adapter HDMI Cable VGA Cable USB Cable for Touch

4K UHD Medical Display



Model Name	27" (16:9)	32" (16:9)
	M270TF	M320TF
Display		
Native Resolution	3840 x 2160 (UHD 4K)	3840 x 2160 (UHD 4K)
Light Intensity	300 cd/m ² (Typ.), optional high brightness up to 700 cd/m ² (Typ.)	350 cd/m ² (Typ.), optional high brightness up to 700 cd/m ² (Typ.)
Contrast Ratio	1000:1 (Typ.)	1000:1 (Typ.)
View Angle	-89~89 (H); -89~89 (V)	-89~89 (H); -89~89 (V)
Active Area	596.16" (H) x 335.34" (V)	708.48" (H) x 398.52" (V)
Response Time	12ms (Gray to Gray)	12ms (Gray to Gray)
Max Colors	1.07B	1.07B
Screen Technology	LED Backlight Technology, TFT Active-matrix, Widescreen, IPS Technology	LED Backlight Technology, TFT Active-matrix, Widescreen, IPS Technology
Synchronization Signal Auto-detect	Digital Separate Sync., Composite Sync., Sync. On Green	Digital Separate Sync., Composite Sync., Sync. On Green
Color Profiles	3D LUT profile selection + 6 general user color schemes	3D LUT profile selection + 6 general user color schemes
Optimal Resolution and Hz	3840 x 2160 @ 60 Hz 4:4:4	3840 x 2160 @ 60 Hz 4:4:4
Detectable Resolutions (Partial List)	640 x 480, 720 x 400, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1080, 1920 x 1200, 2560 x 1440, 3840 x 2160, 4096 x 2160	640 x 480, 720 x 400, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1080, 1920 x 1200, 2560 x 1440, 3840 x 2160, 4096 x 2160
User Controls		
Sensors	Backlight sensor, Ambient light sensor, IR Control	Backlight sensor, Ambient light sensor, IR Control
Control	Capacitive OSD : Power On/Off, On Screen Display Menu, Brightness Control (-/+)	Capacitive OSD : Power On/Off, On Screen Display Menu, Brightness Control (-/+)
Input Signal	• 3G SDI • HDMI 2.0 • DP1.2 • VGA • HDMI 1.4 • Audio In	• 3G SDI • HDMI 2.0 • DP1.2 • VGA • HDMI 1.4 • Audio In
Output Signal	• 3G SDI • DP1.2	• 3G SDI • DP1.2
Mechanical		
Product Dimensions	643.17 x 408.06 x 48 mm (25.3 x 16.1 x 1.8 inches)	777.58 x 477.62 x 48 mm (30.6 x 18.8 x 1.8 inches)
Mounting	VESA mounting 100 x 100 mm VESA mounting 200 x 100 mm	VESA mounting 100 x 100 mm VESA mounting 200 x 100 mm VESA mounting 300 x 100 mm
Product Weight	9.5 kg (20.9 lbs)	13 Kg (28.66 lbs)
Factory Options	• Rubber Bumper • Projected Capacitive Multitouch screen (USB)	• Rubber Bumper • Projected Capacitive Multitouch screen (USB)
Environment		
Operating Temp.	0°C to 35°C, Humidity up to 95%	0°C to 35°C, Humidity up to 95%
Storage Temp.	-20°C to 60°C, Humidity up to 95%	-20°C to 60°C, Humidity up to 95%
IP Rating	Protection: front IP65 - rear IP22	Protection: front IP65 - rear IP22
Power		
Power Input	+24V DC in 150W	+24V DC in 150W
AC Adapter	AC +110~240 V, Universal, ±10%	AC +110~240 V, Universal, ±10%
Certifications		
Type Approval, Testing and Certificates	• IEC 60601-1:2005 + A1:2015 (Ed. 3.1) • IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1) • IEC 62366:2007 + A1:2014 (Ed. 1.1) • ANSI/AAMI ES60601-1:2005/A1:2012 and C1:2009/(R)2012 and A2:2010/(R)2012 • CAN/CSA-C22.2 No.60601-1:14 • EN606001-1-2 • EN55032/EN55024, FCC part 15B • EN60950-1	• IEC 60601-1:2005 + A1:2015 (Ed. 3.1) • IEC 60601-1-6:2010 + A1:2013 (Ed. 3.1) • IEC 62366:2007 + A1:2014 (Ed. 1.1) • ANSI/AAMI ES60601-1:2005/A1:2012 and C1:2009/(R)2012 and A2:2010/(R)2012 • CAN/CSA-C22.2 No.60601-1:14 • EN606001-1-2 • EN55032/EN55024, FCC part 15B • EN60950-1

Product

Stainless

Heavy Duty

HazLoc

Marine

Military

Medical



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