WISE-710

ARM Cortex™-A9 Industrial Gateway with 2 x LAN, 3 x COM Ports, 4 x DI/DO

LEAP AWARDS Winner



RoHS COMPLIANT 2002/95/EC CE FCC

Features

- NXP® ARM® Cortex™-A9 i.MX6 processor
- 1 GB DDR3L RAM and 8 GB eMMC storage onboard
- 10/100/1000 Mbps Ethernet ports
- CANBus with programmable bit rate of up to 1 Mb/sec
- DIO wet contact & dry contact by switch support
- Isolated protection of digital input/output
- Optional mPCIe expansion solt for wireless modules
- Operating system Linux Ubuntu 16.04 (Default) and Yocto 2.1 support
- Wide operating temperature range (-20~55°C/-4~131°F)
- Advantech WISE-PaaS/Edgelink support with more than 200 I/O drivers

Introduction

The WISE-710 industrial IoT gateway is an open platform with Cortex A9 processor, equipped with 3 x serial ports, 2 x 10/100/1000 Ethernet ports, and 4 x DI/DO which is great solution to connect your legacy equipments to the new mesh networks. With its rich I/O, and wide operating temperature design, the gateway plays a role as PLC-side protocol converter, and also data logger for multiple industrial applications.

Specifications

General

- **Certification**: CE, FCC
- **Mounting**: Wall-Mount/ DIN-Rail
- **Power Consumption**: 5W @ $24V_{DC}$
- **Power Requirements**: $24V_{DC}$ ± 20%, 0.5A
- **Dimension (W x H x D)**: 115.58 x 73 x 36 mm (4.55 x 2.87 x 1.42 in)
- **OS Support**: Linux Ubuntu 16.04 , 18.04 and Linux Yocto 2.1
- **Weight (Net)**: 0.17 kg (0.375 lb)

System

- **CPU**: NXP® ARM® Cortex™-A9 i.MX6 dual-core 1.0 GHz processor
- **Indicators**: LEDs for Power, Wireless, LAN, Serial
- **Storage**: 8GB eMMC
- **Working Memory**: 1GB DDR3 RAM (Max. 2GB)
- **SD Slot**: 1 x Micro-SD slot
- **Real-time Clock**: Yes

Communication

- **Serial Port**: COM1 1x RS232/485, DB9, 0.15~115.2kbps
COM2 1x RS485/CANBus (by switch), 2pin,
50~921.6kbps; CANBus, 20~1000k
COM3 1x RS485, 2pin, 0.15~115.2kbps
- **Ethernet Port**: 2 x 10/100/1000 Base-T RJ-45 ports
- **USB Port**: 1 x Micro USB Host (Support flash storage)
- **Isolated DI/DO**: 4-ch digital input, 4-ch digital output, isolation protection voltage 2000 V_{DC}
- **Expansion slot**: 1x Full size mPICe with USB signal

Gateway Software

- **Application Software**: WISE-PaaS/Edgelink
- **Number of IO Tag**: 3000 Tags
- **Protocol Support**: more than 200 drivers

Environment

- **Operating Temperature**: -20 ~ 55 °C (-4 ~ 131 °F) with 0.7 m/s air flow
- **Storage Temperature**: -40 ~ 75 °C (-40 ~ 167 °F)
- **Humidity**: 10 ~ 95% RH @ 40 °C, non-condensing
- **Vibration During Operation**: 2 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
- **Shock During Operation**: 10G, IEC 60068-2-27, half sine, 11 ms duration

Ordering Information

- **WISE-710-N600C**: Cortex™-A9 Processor, Linux Ubuntu 16.04, 1G RAM, 2 x LAN, 3 x COM, 4 x Di/DO, 1 x mPCIe
- **WISE-710-N600D**: Cortex™-A9 Processor, Linux Ubuntu 18.04, 2G RAM, 2 x LAN, 3 x COM, 4 x Di/DO, 1 x mPCIe
- **ESRP-PCS-WISE710**: WISE-710-N600C with Linux Yocto 2.1, EdgeLink

Expansion Kits

WISE-710-0010A

Analog Input

- **Channels**: 4
- **Resolution**: 16bits Bipolar; 15bits Unipolar
- **Sampling Rate**: 10Hz (Total) with50/60Hz Rejection
- **Accuracy**: ±0.1% for Voltage Input; ±0.2% for Current Input
- **Input Range**: 0~150mV, 0~500mV, 0~1V, 0~5V, 0~10V, ±150mV, ±500mV, ±1V,±5V, ±10V, 0~20mA, ±20mA, 4-20mA
- **Input Impedance**: >1MΩ (Voltage), 240 Ω (External resistor for current)
- **Support Data**: Scaling and Averaging

Digital Input

- **Channels**: 4 (Dry Contact)
- **Supports 200Hz Counter Input (32-bit + 1-bit overflow)**
- **Supports keep/discard counter value on power-off**
- **Support inverted digital input status**

WISE-710-0020A

Digital Input

- **Channels**: 6 (Dry Contact)
- **Supports 3kHz Frequency Input**

Digital Output (Sink Type)

- **Channel**: 2
- **Output Current**: 100 mA, At 0 -> 1: 100 us, At 1 -> 0: 100 us (for Resistive Load)
- **Supports Pules Output 5 kHz**
- **Max. Load Voltage**: 30V

Serial Port

- **Port Number**: 1
- **Type**: RS-485
- **Data Bits**: 7, 8
- **Stop Bits**: 1, 2
- **Parity**: None, Odd, Even
- **Baud Rate (bps)**: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
- **Protocol**: Modbus/RTU (Total 32 addresses by 8 max. instructions)

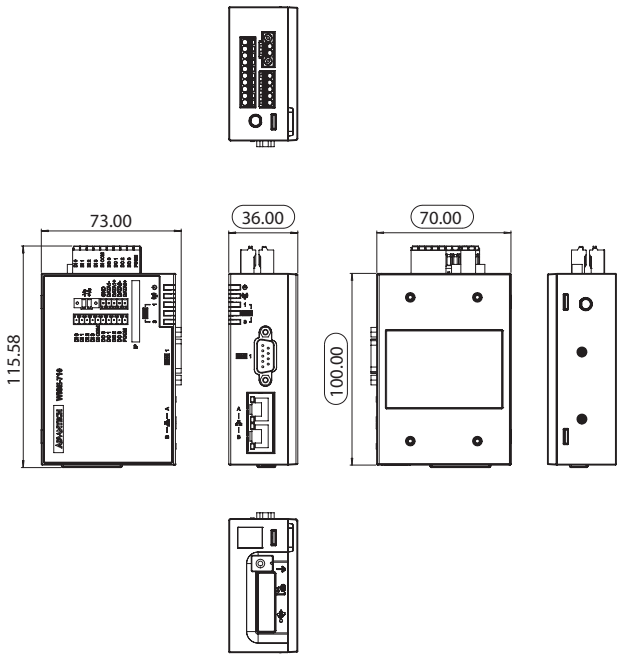
All product specifications are subject to change without notice.

Last updated: 22-Apr-2026

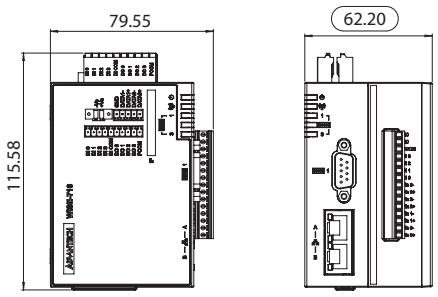
Dimensions

Unit: mm

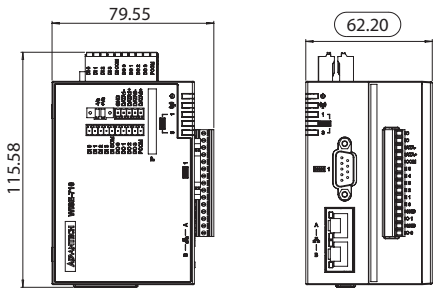
WISE-710-N600C



WISE-710-N600C + WISE-710-0010A



WISE-710-N600C + WISE-710-0020A



Optional Accessories

WiFi Solution

968AD00605	WiFi Module, 802.11 a/b/g/n (2.4&5GHz), BT5, 1T1R
9656EWMG00E	Half-size to Full-size Mini PCIe Bracket Pack
1750009036-01	Cable Ant. SMA/F-R-BH MHF1/113 BLK L100mm
1750008717-01	Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-RBLK for 968AD00605
96PD-RYWDB002A	968AD00605 Wifi Module with TELEC antenna and SMA cable for Japan region
EWM-W172H01E	802.11ac/a/b/g/n 2T2R Wi-fi + Bluetooth 4.2 Half, TELEC
1750008717-01	Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK for EWM-W172H01E, TELEC

LTE Solution

968AD00589	LTE Module, Global Band
1750009067-01	Dipole Ant. LTE 1.5/2dBi SMA/M BLK 144
1750009035-01	Cable Ant. SMA/F-BH MHF1/113 BLK L100mm

* Please contact regional distributor to purchase TELEC antenna locally.

Others

96FMMSDI-4G-ET-AT1	ATP 4G MICRO SD CARD I-GRD SLC(G)
96FMMSDI-8G-ET-AT1	ATP 8G MICRO SD CARD I-GRD SLC(G)

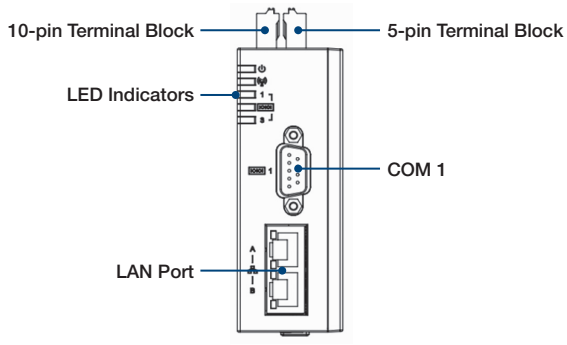
Power Supply

96PSD-A20W24-MM	A/D 100-240V 20W 24V MDR DIN RAIL
1700029720-01	PSU power cord (USA), AC Conn., 3-pin, UL/CSA, 1.83M
1700030520-01	PSU power cord (CN), AC Conn., 3-pin, CCC, 1.5M
1700031408-01	PSU power cord (EU), AC Conn., 3-pin, 80CM (EU)

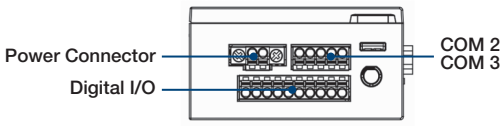
Power Adaptor

XWISE-IPU15-108	110-220V AC Adaptor, US AC Plug
XWISE-AUPLUG	AU Type Plug for XWISE-IPU15-108
XWISE-EUPLUG	EU Type Plug for XWISE-IPU15-108
XWISE-UKPLUG	UK Type Plug for XWISE-IPU15-108

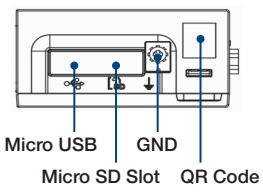
Front I/O View



Top I/O View



Underside I/O View



Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact Advantech for certificate compliance.

Online Download www.advantech.com/products

Tento produkt můžete zakoupit u společnosti AutoCont IPC a.s.

IPC AutoCont

AutoCont IPC a.s.

Váš dodavatel průmyslových počítačů, komponent a speciálních průmyslových IT systémů.

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Doprava zdarma v ČR a SR při objednávce nad 10 000 Kč bez DPH nebo nad 400 EUR.

PRODLOUŽENÁ ZÁRUKA
Záruka 2 roky na vyráběné počítače s možností jejího prodloužení až na 5 let.

ODMĚNA ZA VĚRNOST
Pravidelní zákazníci u nás nakupují za nižší ceny. Výše slevy se odvíjí od realizovaného obratu.

SERVIS ON-SITE A IN-TIME
K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.