

# EKI-8528-4XF / EKI-8528-4XFL

## Industrial L3/L2 Full Gigabit modular with 4x10G SFP+ managed Ethernet Switch



### Features

- 3 x 8 Gigabit ports hot-swappable module slots + 4 x 10G SFP+ ports
- Support VRRP, RIP v1/v2, OSPFv3, PIM and NAT (EKI-8528-4XF only)
- TSN and 1588v2(PTP) supported
- Features IEEE 802.1AS Time Synchronization, IEEE 802.1Qbu Frame Preemption, IEEE 802.1Qbv Time Aware Shaper and IEEE 802.1CB Seamless Redundancy
- Redundancy: X-Ring Pro (< 20ms @250units), X-Chain
- Security: 802.1X (port-based, MD5/PEAP encryption), RADIUS
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- Wide operating temperature range of -40~75°C
- Dual power module slot options for 110/220V<sub>AC</sub> or 24-48V<sub>DC</sub> input module
- IIoT module slots reserved for optional HSR/PRP module

### Introduction

EKI-8528 series is a standard 19" rackmount Layer 3 and 2 modular managed switch which provides up to 24 Gigabit ports and 4x10Gigabit uplink solution, it is designed for medium and large Industrial networking environment, as a distribution level L3 switch, it supports RIPv1/v2, OSPFv3, VRRP routing protocols, PIM multiple routing feature and provides 4.5K routing table size for data exchange among multiple network nodes.

Users can choose different Ethernet modules (RJ45 or SFP) and Power modules(24-48V<sub>DC</sub> or 110/220V<sub>AC</sub>) for bringing high flexibility to fulfil various kinds of industrial scenario, such as power stations and trackside signaling which are connecting the wide area of networking devices.

### Specifications

#### Interface

- Ethernet port 3 x 8 port module slots\*
- Console port RJ45 (RS-232)
- Relay output 2-pin Terminal Block
- Power Connection 2 x Power supply module slots\*
- USB port Type A

\*Please refer to accessory list for detail of interface modules

#### LED Display

- System LEDs PWR1, PWR2, SYS, R.M., Alarm
- Port LED Link Speed, link/ Act

#### Switch Properties

- DRAM 256MB
- Flash 128MB
- Switching capacity 128 Gbps
- Forwarding rate 95 Mpps
- Max. IGMP Group 1024
- Max static VLANs 256
- VLAN ID range 1-4094
- MAC table 32K
- Jumbo frame 10KB
- Packet Buffer 32Mbits
- Max Priority Queues 8

#### Physical

- Enclosure Metal shell and die-casting
- Protection Class IP 30
- Installation 1U 19" Rackmount
- Dimensions(WxHxD) 438 x 44 x 363.5mm (17.24" x 1.73" x 14.31")
- Weight 5.5 kg

#### Environment

- Operating Temperature -40~75°C with 24xGigabit + 4x10G SFP+ port operation
- Storage Temperature -40 ~ 85°C (-40 ~ 185°F)
- Ambient Relative Humidity 5~ 95% (non-condensing)

#### Power

- System Power Consumption 75 Watts(Max)
- Input Voltage 110/220V<sub>AC</sub>, 24-48V<sub>DC</sub> power module\*
- Over current Protection Supported
- Reverse Polarity Protection Supported

\*Please refer to accessory list for detail of power inputs

#### Switch Standards

- IEEE 802.3 for 10BaseT
- IEEE 802.3u for 100BaseT(X) and 100BaseFX
- IEEE 802.3ab for 1000BaseT(X)
- IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
- IEEE802.3ae for 10GBase over Fiber
- IEEE 802.3x for flow control
- IEEE 802.1D-2004 for Spanning Tree Protocol
- IEEE 802.1w for Rapid Spanning Tree Protocol
- IEEE 802.1s for Multiple Spanning Tree Protocol
- IEEE 802.1p for Class of Service
- IEEE 802.1Q for VLAN Tagging
- IEEE 802.1X for authentication
- IEEE 802.3ad for Port Trunk with LACP

#### Certification

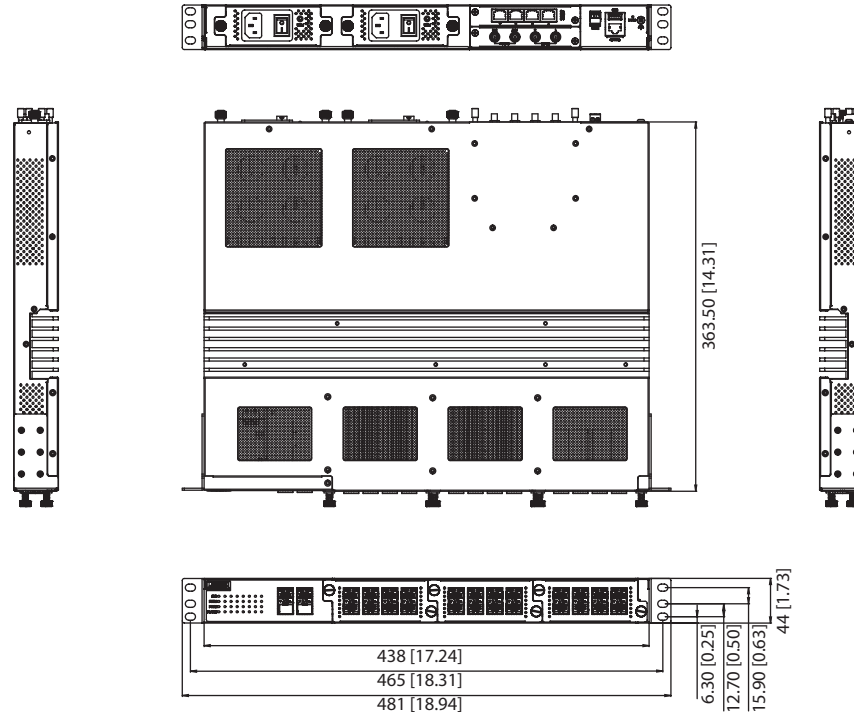
- Safety EN62368
- EMI CISPR 22, 32, FCC Part 15B Class A
- EMS EN61000-4-2 (ESD); EN61000-4-3 (RS); EN61000-4-4 (EFT); EN61000-4-5 (Surge); EN61000-4-6 (CS); EN61000-4-6(CS); EN-61000-4-8 (PFMF)
- Shock IEC60068-2-27
- Freefall IEC60068-2-32
- Vibration IEC60068-2-6
- Power plant IEC61850-3, IEEE1613
- Railway EN50121-4

#### L2 Features

- Link Aggregate Static Trunk, 802.3ad LACP
- VLAN 802.1Q Tag-based, 802.1v Protocol-based VLAN, 802.1ad VLAN stacking, GVRP, GMRP, MAC/IP subnet/Private/Voice VLAN
- Port Mirroring Per port, Multi-source port
- IP Multicast IGMP Snooping v1/v2/v3, MLD Snooping
- Redundancy IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP

## Dimensions

Unit: mm



### L3 Feature (EKI-8528-4XF only)

- Routing protocol: Static Routing, RIP v1/v2, OSPFv2, VRRPv2, PIM-SM
- Routing Table: IPv4 up to 3K, IPv6 up to 1.5K

### QoS

- Priority Queue: Scheduling WRR (Weighted Round Robin), SP (Strict Priority)
- Class of Service: IEEE 802.1p based CoS, IP TOS, DSCP, Port priority
- Rate Limit: Ingress/Egress Rate limit

### Security

- Loop detection: Port-based detection/ prevention
- Storm Control: Broadcast, Unknown Multicast, Unknown unicast
- Port Security: Static MAC, MAC Violation Notice
- Authentication: 802.1x (Port-Based, MAC-Based), RADIUS, TACACS+
- Account Manager: Multiple Account, 0-15 User Privilege
- IP Security: IP source guard, DHCP snooping, ARP spoofing
- ACL: L2, L3 Access Control List, Permit/Deny/Redirect

### Management

- OAM: IEEE802.1ag, Continuity Check, IEEE802.3ah, Link Monitor, Remote Loopback, Dying Gasp, Diagnostic features
- PTP: IEEE1588v2, Precision 1ns, Boundary/ Transparent Clock
- DHCP: Client, Server, DHCP Relay, Option 82 relay
- Config & Access: IPv4/ IPv6, SNMP v1/v2c/v3, WEB GUI, Telnet, RMON, SSH 2.0, SSL(TLSv1)
- Upgrade/ Backup: Standard MIB, Private MIB
- Others: TFTP, HTTP, SFTP; Firmware Dual Image; N-key

### TSN

- Standardized Real-Time Ethernet: Time Sensitive Networks (TSN), IEEE 802.1AS, IEEE 802.1Qci, IEEE 802.1CB, IEEE 802.1Qbv, IEEE 802.1Qbu

## Accessories (Need to be ordered separately)

### Ethernet Modules

|                                                                                     | Part Number    | Description                                              |
|-------------------------------------------------------------------------------------|----------------|----------------------------------------------------------|
|  | EKI-ME08-8GF-A | Gigabit SFP Module with 8 x 100/1000Base SFP ports       |
|  | EKI-ME08-8GT-A | Gigabit Ethernet Module with 8 x 10/100/1000BaseTX ports |

### Power Supply Modules

|                                                                                     | Part Number    | Description                                                                                                |
|-------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------|
|  | EKI-MP01-ACO-A | Power supply module of 110/220V <sub>AC</sub> /V <sub>DC</sub> input with 3-pin IEC male and on/off switch |
|  | EKI-MP01-DC-A  | Power supply module of 24-48V <sub>DC</sub> input with 2-pin terminal block                                |

## Ordering Information

| Part Number     | Software | 1000/10G Base SFP+ Ports | 100/1000 Base SFP ports | 10/100/1000 BaseTX Ports | Note                                                            |
|-----------------|----------|--------------------------|-------------------------|--------------------------|-----------------------------------------------------------------|
| EKI-8528-4XF-A  | Layer 3  | 4                        | Up to 24                | Up to 24                 | Ethernet and Power supply module need to be ordered separately. |
| EKI-8528-4XFL-A | Layer 2  |                          |                         |                          |                                                                 |

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



## AutoCont IPC a.s.

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

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### PRŮMYSLOVÉ POČÍTAČE

*fanless embedded PC, do racku, ...*



### POČÍTAČE S DISPLEJEM

*panelové PC, terminály, do vozidel, ...*



### AUTOMATIZACE A SBĚR DAT

*převodníky, karty, moduly, switche, ...*



### PERIFERIE A KOMPONENTY

*monitory, klávesnice, desky, skříně, ...*



### NOTEBOOKY A TABLETY

*odolné, windows, android, IP65, ...*



### INFORMAČNÍ KIOSKY

*interiérové, venkovní, ...*



### MEDICÍNSKÁ TECHNIKA

*počítače, tablety, LCD, klávesnice, ...*



### SOFTWAREVÁ ŘEŠENÍ

*pro výrobu, zaměstnance, kiosky, ...*



### PŘEJÍT DO E-SHOPU

[eshop.autocont-ipc.cz](http://eshop.autocont-ipc.cz)



### DOPRAVA ZDARMA

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 obrátu.



### SERVIS ON-SITE A IN-TIME

K projektovým dodávkám nabízíme rozšířenou podporu a servis s garancí výměny zařízení do 48 hodin.