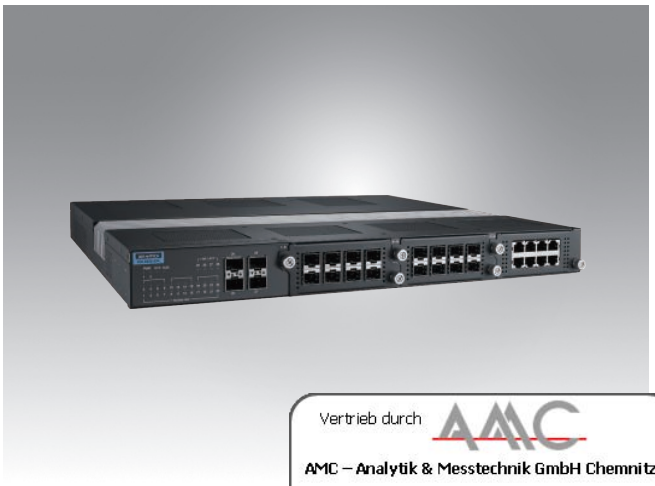
EKI-8528-4XF

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



Vertrieb durch AMC
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Features

- 3 x 8 Gigabit ports hot-swappable module slots + 4 x 10G SFP+ ports
- Supports VRRP, RIP v1/v2, OSPFv3, PIM-SM and PIM-DM
- Redundancy: X-Ring Pro (< 20ms @250units), X-Chain
- Features IEEE 802.1AS Time Synchronization, IEEE 802.1Qbu Frame Preemption, IEEE 802.1Qbv Time Aware Shaper and IEEE 802.1CB Seamless Redundancy
- 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_{AC} or 24-48V_{DC} input module
- 2 x IIoT module slots reserved for LTE/ GPRS/ LAN/ DI/DO/ Serial device server modules

Introduction

EKI-8528-4XF is a standard 19" rackmount Layer 3 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_{DC} or 110/220V_{AC}) 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
- **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** TBD

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** 60 Watts(Max)
- **Input Voltage** 110/220V_{AC}, 24-48V_{DC} 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

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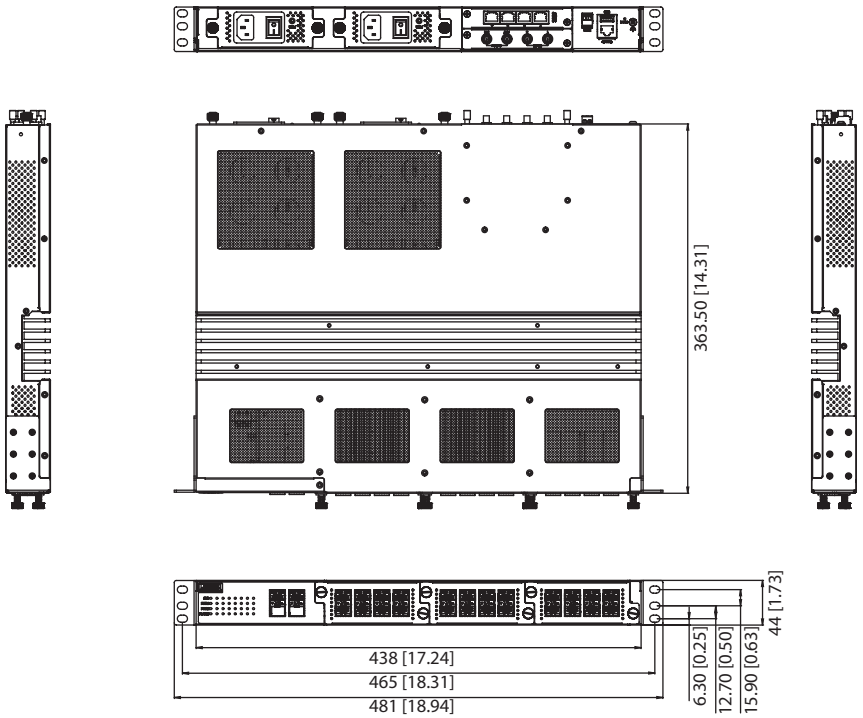
Dimensions

Unit: mm



L3 Feature spec

- **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)
  Standard MIB, Private MIB
- **Upgrade/ Backup** — TFTP, HTTP, SFTP; Firmware Dual Image; N-key
- **Others** — SNTP/NTP client, DNS client, Syslog

TSN

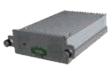
- **Standardized Real-Time Ethernet** — Time Sensitive Networks (TSN), IEEE 802.1AS, IEEE 802.1Qci, IEEE 802.1CB, IEEE 802.1Qbv, IEEE 802.1Qbu

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_{AC}/V_{DC} input with 3-pin IEC male and on/off switch Operating Voltage: 85 to 264V_{AC}, 88 to 370V_{DC}
	EKI-MP01-DC-A	Power supply module of 24-48V_{DC} input with 2-pin terminal block Operating Voltage: 17 to 137V_{DC}

Ordering Information

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