EKI-8712G-4XFPI

8 x GE & 4 x 10G SFP+ Port Managed Industrial L3 PoE Switch



Features

- 8 x Gigabit Ethernet ports + 4 x SFP+ ports
- L3 function: Static route, NAT
- Support 8 x IEEE 802.3at/af PoE ports for PD demands
- Redundancy: X-Ring Pro (ultra-high-speed recovery time, <20 ms), RSTP/STP (802.1w/1D)
- IXM function for fast deployment
- Security Pack with 802.1X, ACL, RADIUS, TACACS+, MAB Authentication, SNMPv3, HTTPS, SSH, and SFTP
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- Supports NMS for easy and visualized to monitor and manage network remotely
- Dual 48 ~ 57 V_{DC} power input and 1 x relay output

Vertrieb durch AMC
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Introduction

The EKI-8712G-4XFPI is a DIN rail L3 switch that supports static route and NAT. It comes with 8 10/100/1000BaseT(X) ports with 802.3af/at supported and 4 SFP+ ports. It features 8 IEEE802.3af/at PoE ports, -40~75°C operating temperature, and Din-Rail/Wall-Mount installation options, making it ideal for application which requires high-bandwidth transmission, more PoE ports, and Din-Rail installation. In addition, it is also embedded with Advantech exclusive features like IXM which benefits users for fast deployment and can dramatically save engineers time and costs, X-Ring Pro which achieves ultra-high speed recovery time of less than 20ms to ensure network stability, and Security Pack which protects your network from internal intrusion.

Specifications

Interfaces / Communications

- **I/O Port**: 8 x 10/100/1000BASE-T/TX RJ-45
4 x SFP+ (mini-GBIC) port
Auto-Negotiation, Full/Half Duplex Mode
Auto MDI/MDI-X Connection
- **Standards**: IEEE 802.3 for 10BaseT
IEEE 802.3u for 100BaseT(X)/FX
IEEE 802.3ab 1000BaseT(X)
IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
IEEE802.3ae for 10GBase over Fiber
IEEE 802.3x for Flow Control
- **PoE**: Port 1 ~ Port 8: IEEE 802.3at/af
- **Console Port**: RS-232 (RJ45)
- **Power Connector**: 8-pin screw Terminal Block (including relay)
- **Digital Input Channels**: 1
- **Digital Inputs**: +13 to +30 V for state 1
-30 to +3 V for state 0
Max. input current: 8 mA
- **USB**: USB Type A

Physical

- **Enclosure**: Metal Shell
- **Protection Class**: IP 40
- **Installation**: DIN-Rail, Wall-mount
- **Dimensions (W x H x D)**: 57.5 x 152 x 116 mm

LED Indicators

- **System LED**: PWR1, PWR2, SYS, Alarm and R.M.
- **Port LED**: Link / Speed / Activity / PoE

Environment

- **Operating Temperature**: *-40 ~ 75°C (-40 ~ 167°F)
- **Storage Temperature**: -40 ~ 85°C (-40 ~ 185°F)
- **Ambient Relative Humidity**: 5 ~ 95% (non-condensing)
- **Overload Current Protection**: Present
- **Reverse Polarity Protection**: Present
- **MTBF**: TBD

* With copper SFP x 4: -40~50°C (-40 ~ 122°F)

Power

- **Power Consumption**: 24W @54V_{DC} (system)
- **Power Input**: 48 V_{DC} (46 to 57 V_{DC})
53 -57 V_{DC} is recommended for 802.3at redundant dual power input
- **Power Budget**: 240W
- **Fault Output**: 1 Relay Output with current carrying capacity of 1 A @ 24 V_{DC}

Certification

- **Safety**: UL 62368
- **EMI**: CE, CISPR 32, FCC Part 15B Class A
- **EMS**: IEC 61000-4-2 ESD: Contact: 8 kV; Air: 15 kV
IEC 61000-4-3 RS: 20 V/m
IEC 61000-4-4 EFT: Power: 4 kV; Signal: 4 kV
IEC 61000-4-5 Surge: Power: 4 kV; Signal: 4 kV
IEC 61000-4-6 CS: 10 V
IEC 61000-4-8 PFMF
- **EMC**: EN 61000-6-2
EN 61000-6-4
- **Shock**: IEC 60068-2-27
- **Freefall**: IEC 60068-2-32
- **Vibration**: IEC 60068-2-6

Switch Properties

- **Switch Capacity** 96Gbps
- **Transmission Rate** 71.2Mpps
- **MAC Table Size** 16K
- **Jumbo Frame** 12288 Bytes
- **Max. IGMP Group** 256
- **Max. VLAN Group** 256 (VLAN ID 1 ~ 4094)

L2 Features

- **VLAN Arrange** 802.1Q Tag-based VLAN, 802.1ad QinQ VLAN Stacking
- **Port Mirroring** 1 to 1, N to 1
  Max. Mirror Session: 4
- **RSPAN** Remote Switched Port Analysis
- **GARP** GVRP, GMRP
- **IP Multicast** IGMP Snooping v1/v2/v3, MLD Snooping, IGMP Immediate leave
- **Storm Control** Broadcast, Multicast, Unknown unicast
- **LLDP** 802.1ab LLDP, LLDP-MED
- **Industrial Protocol** Modbus/TCP
- **Redundancy** IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring Pro, with ultra high-speed recovery time less than 20ms, ERPS(G.8032)

QoS

- **Priority Queue Scheduling** WRR (Weighted Round Robin), SP (Strict Scheduling Priority) Hybrid Priority, Max. Priority Queues: 8
- **Class of Service** IEEE 802.1p Based CoS, IP TOS, DSCP based CoS
- **Rate Limiting** Ingress Rate limit, Egress Rate limit
- **Link Aggregation** IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

Security

- **Port Security** Static/Dynamic MAC, Max. Learning Limit, MAC Violation Notice
- **802.1X** Port-based/MAC-based Authentication (MD5/PEAP/TLS/TTLS Encryption)
- **MAB** MAC Authentication Bypass
- **Authentication** RADIUS, TACAS+
- **IP Security** IP Source Guard, DHCP Snooping, ARP Spoofing Prevention
- **ACL** Access Control List (IP-ACL, MAC-ACL)
  Max. ACL Entries: 128

Management

- **PoE** PoE system settings, port settings and status
- **DHCP** Client, Server, Option66/67/82, DHCP Relay
- **Access** SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB-II, Private MIB, Ethernet-Like MIB, RMON MIB (Group 1, 2, 3, 9)
- **Security Access** SSH2.0, SSL
- **Software Upgrade** TFTP, SFTP, HTTP, Dual Image
- **NTP** SNTP client

Routing

- **Unicast Routing** NAT, Static routing

Ordering Information

- **EKI-8712G-4XFPI-AE** 8GE + 4x10G SFP+ Manged PoE Ethernet L3 Switch W/T

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Note: For SFP copper type, only 10Gbps supported.