

EKI-7708E-4FP

EKI-7708E-4FPI

4FE+4G SFP Port Gigabit Managed Redundant Industrial PoE Switch



Features

- ③ 4 x IEEE 802.3 af/at PoE fast Ethernet ports + 4 x SFP ports
- ③ SFP socket for easy and flexible fiber expansion
- ③ Redundancy: X-Ring Pro (ultra-high-speed recovery time, <20 ms), RSTP/STP (802.1w/1D)
- ③ IXM function enables fast deployment
- ③ Security: 802.1x (port-based, MD5/TLS/TTLS/PEAP encryption), RADIUS
- ③ Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- ③ NEMA TS2 for traffic control
- ③ EN50121-4 approval for railway trackside deployment
- ③ Wide operating temperature range of -40 ~ 75°C (EKI-7708E-4FPI)
- ③ Dual 48 V_{DC} power input and 1 x relay output

Introduction

The EKI-7708E-4FP/4FPI provide 4 fast Ethernet IEEE 802.3 af/at PoE ports and 4 SFP (mini-GBIC) ports. They can provide up to 30 W per port to fulfill high-power-consumption power device requirements. They are embedded with Advantech's IXM function, which can benefit users with fast deployment and can save considerably on engineering time and costs. The EKI-7708E series also support NMS to help IT managers with networking maintenance and failure prevention. Finally, they are equipped with X-Ring Pro, which can achieve ultra-high-speed recovery times of <20 ms, thus ensuring network stability. The EKI-7708E-4FPI in particular also features a wide operating temperature range of -40 ~ 75°C and NEMA TS2 rating, making it ideal for use in traffic applications. Finally, the EKI-7708E-4FP/4FPI meet the EN50121-4 European railway standard requirements for emissions and railway platform and trackside deployment.

Specifications

Interface

- ③ **I/O Port** 4 x 10/100BASE-T/TX RJ-45
4 x SFP (mini-GBIC) port
- ③ **Standards** IEEE 802.3 for 10BASE-T
IEEE 802.3u for 100BaseT(X)/FX
IEEE 802.z for 1000BaseX
IEEE 8023x for Flow Control
- ③ **Console port** RS-232 (RJ45)
- ③ **Power Connector** 6-pin screw
Terminal Block (including relay)

Physical

- ③ **Enclosure** Metal Shell
- ③ **Protection Class** IP 30
- ③ **Installation** DIN-Rail
- ③ **Dimensions (W x H x D)** 74 x 152 x 105 mm (2.91" x 5.98" x 4.13")

LED Display

- ③ **System LED** PWR1, PWR2,
SYS, Alarm and R.M.
- ③ **Port LED** Link / Speed /
Activity

Environment

- ③ **Operating Temperature** -40 ~
75°C (-40 ~ 167°F) (7708E-4FPI)
- ③ -10 ~ 60°C (-40 ~ 140°F) (7708E-4FP)
- ③ **Storage Temperature** -40 ~
85°C
- ③ **Ambient Relative Humidity** 10 ~
95% (non-condensing)
- ③ **Humidity** 10 ~ 95% (non-
condensing)

Power

- ③ **Power Consumption** 12.1W @ 48V_{DC}
(System)
- ③ **Power Input** 48 V_{DC} (46 to 57 V_{DC}),
53-57 V_{DC} is recommended for 802.3at,
redundant dual power input
- ③ **Power Budget** 120W
- ③ **Fault Output** 1 Relay Output

Certification

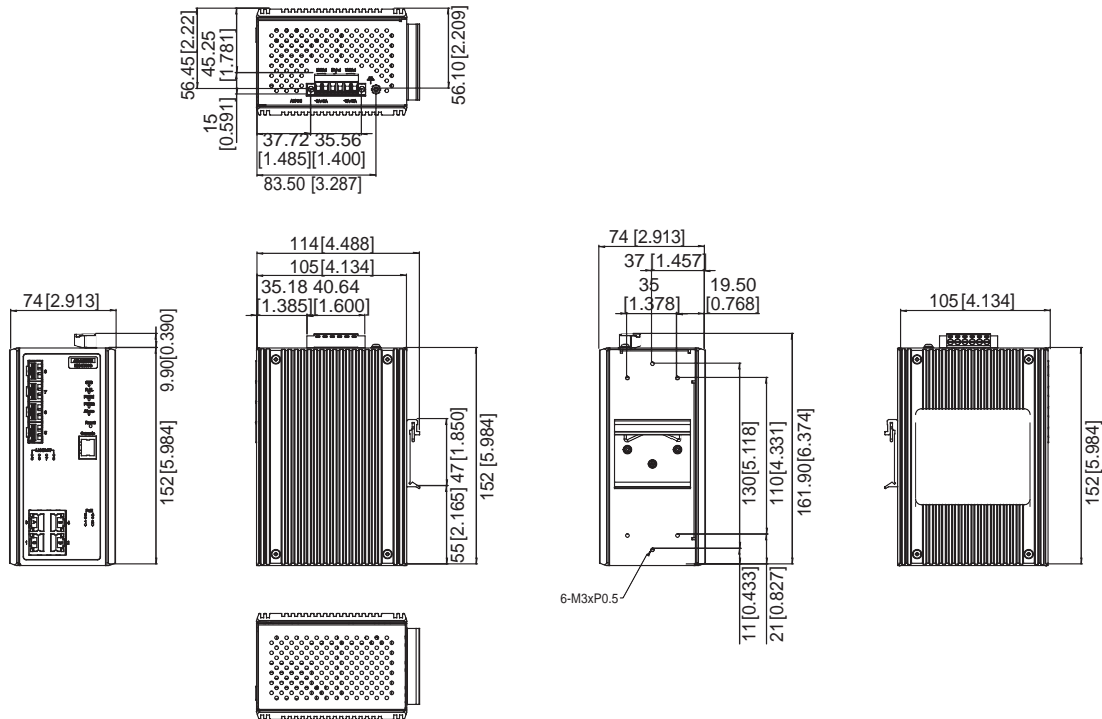
- ③ **EMI CE, FCC Class A**
- ③ **EMC** EN 61000-4-2
EN 61000-4-3
EN 61000-4-4
EN 61000-4-5
EN 61000-4-6
EN 61000-4-8
EN 61000-6-2
EN 61000-6-4
EN 50121-4
- ③ **Shock** IEC 60068-2-27
- ③ **Freefall** IEC 60068-2-32
- ③ **Vibration** IEC 60068-2-6
- ③ **Traffic control** NEMA TS2

*= Compliant

- ③ **Patent**
<http://www.advantech.com/legal/patent>

Dimensions

Unit: mm[inch]



Panel Cut-out Dimensions: 105 x 152 x 74 (4.134" x 5.98" x 2.913")

L2 Features

- ③ **L2 MAC Address** 8K
- ③ **Jumbo Frame** 9216 Bytes
- ③ **VLAN Group** 256 (VLAN ID 1 ~ 4094)
- ③ **VLAN Arrange** Port based VLAN, Q-in-Q (VLAN Stacking), GVRP
- ③ **Port Mirroring** Per port, Multi-source port,
- ③ **IP Multicast** IGMP Snooping v1/v2/v3, MLD Snooping, IGMP Immediate leave
- ③ **Storm Control** Broadcast, Multicast, Unknown unicast
- ③ **Redundancy** IEEE 802.1D-STP, IEEE 802.1w-RSTP, X-Ring Pro, with ultra high-speed recovery time less than 20ms

QoS

- ③ **Priority Queue** WRR (Weighted Round Robin), SP (Strict Scheduling)
- ③ **Scheduling** Priority) Hybrid Priority
- ③ **Class of Service** IEEE 802.1p Based CoS, IP TOS, DSCP based CoS
- ③ **Rate Limiting** Ingress Rate limit, Egress Rate limit
- ③ **Link Aggregation** IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

Security

- ③ **Port Security** Static, Dynamic IP Source Guard, ARP Spoofing Prevention, Access Control List, DHCP Snooping
- ③ **Authentication** 802.1x (Port-Based, MD5/TLS/TLS/PEAP)

Management

- ③ **DHCP** Client, Server, Option66/67/82
- ③ **Access** SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB, Private MIB
- ③ **Security access** SSH2.0, SSL
- ③ **Software upgrade** TFTP, HTTP, Dual Image
- ③ **NTP/SNTP client**

Ordering Information

- ③ **EKI-7708E-4FPI-AE** 4FE + 4G SFP Port Managed PoE Ethernet Switch w/ Wide Temp
- ③ **EKI-7708E-4FP-AE** 4FE + 4G SFP Port Managed PoE Ethernet Switch

Encryption), TACACS+

Note: For SFP copper type, only 1000Mbps supported.

Online Download www.advantech.com/products

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