

# EKI-7708G-4FP

# EKI-7708G-4FPI

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



## Features

- ③ 4 x IEEE 802.3 af/at PoE Gigabit ports + 4 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-7708G-4FPI)
- ③ Dual 48 V<sub>DC</sub> power input and 1 x relay output

## Introduction

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

## Specifications

### Interface

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

### Physical

③	<b>Enclosure</b> Metal Shell
③	<b>Protection Class</b> IP 30
③	<b>Installation</b> DIN-Rail
③ <b>Dimensions (W x H x D)</b>	74x152x105mm (2.913x5.98x4.134inch)

### LED Display

③ Alarm and R.M.	<b>System LED</b> PWR1, PWR2, SYS,
③ Activity	<b>Port LED</b> Link / Speed /

### Environment

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

### Power

③ (System)	<b>Power Consumption</b> 12.1W @ 48V <sub>DC</sub>
③	<b>Power Input</b> 48 V <sub>DC</sub> (46 to 57 V <sub>DC</sub> ), 53-57 V <sub>DC</sub> is recommended for 802.3at, redundant dual power input
③	<b>Power Budget</b> 120W
③	<b>Fault Output</b> 1 Relay Output

### Certification

③	<b>EMI CE, FCC Class A</b>
③ <b>EMC</b>	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN50121-4
③ <b>Shock</b>	IEC 60068-2-27
③	<b>Freefall</b> IEC 60068-2-32
③	<b>Vibration</b> IEC 60068-2-6
③	<b>Traffic control</b> NEMA TS2

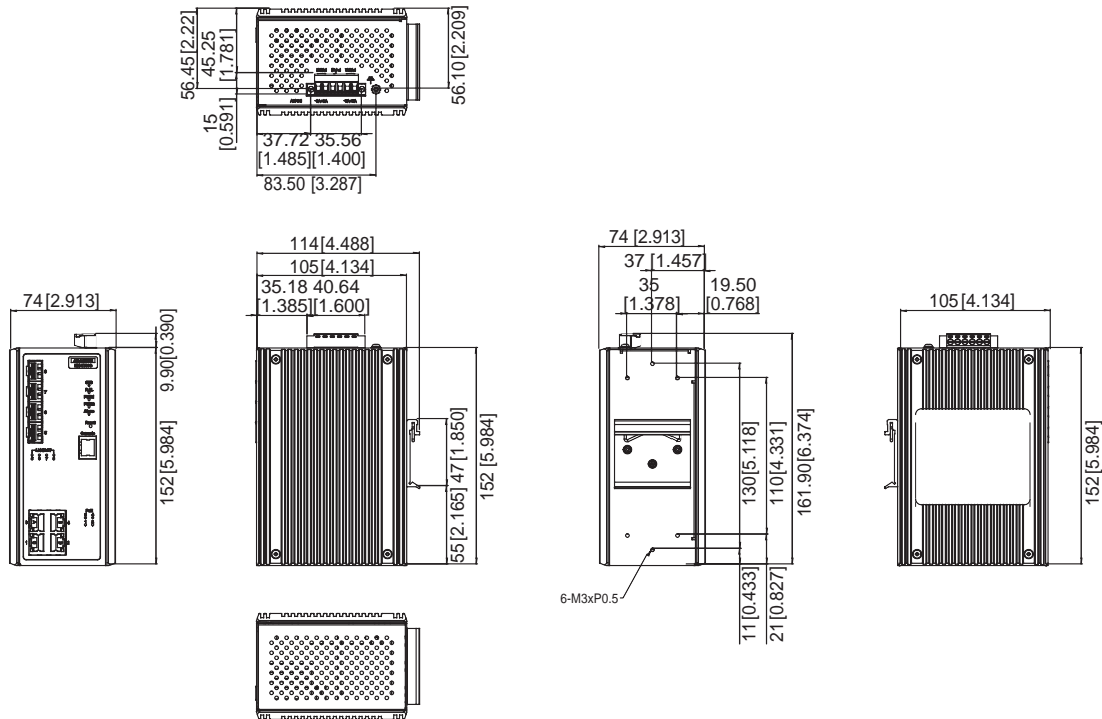
\*= Compliant

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



## Dimensions

Unit: mm[inch]



Panel Cut-out Dimensions (W x H x D): 74 x 152 x 105 mm (2.913 x 5.98 x 4.134 inch)

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

Encryption), TACACS+

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

**Online Download** [www.advantech.com/products](http://www.advantech.com/products)

**Industrial Communication Products Ltd**

**Tel: +44(0) 203 086 9569**

**Web: [www.industrialcomms.com](http://www.industrialcomms.com)**

**Email: [sales@industrialcomms.com](mailto:sales@industrialcomms.com)**