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_{DC} power input and 1 x relay output

IPv6 5 Year Warranty CE FCC RoHS COMPLIANT 2002/95/EC

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 **I/O Port**	4 x 10/100/1000BASE-T/TX RJ-45	
	4 x SFP (mini-GBIC) port	
③ 10BaseT	**Standards**	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	**Console port**	RS-232 (RJ45)
③ Block (including relay)	**Power Connector**	6-pin screw Terminal

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 (2.913 x 5.98 x 4.134 inch)	

LED Display

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

Environment

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

Power

③ (System)	**Power Consumption**	12.1W @ 48V_{DC}
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	
	EN50121-4	
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]

56.45[2.221]
45.25 [1.781]
56.10 [2.209]
15 [0.591]
37.72 35.56
[1.485][1.400]
83.50 [3.287]

74 [2.913]
9.90[0.390]
152[5.984]

114[4.488]
105[4.134]
35.18 40.64
1.385][1.600]
55 [2.165] 47 [1.850]
152 [5.984]

74 [2.913]
37 [1.457]
35 19.50
[1.378] [0.768]
130[5.118]
110[4.331]
161.90[6.374]
11 [0.433]
21 [0.827]
6-M3xP0.5

105 [4.134]
152[5.984]
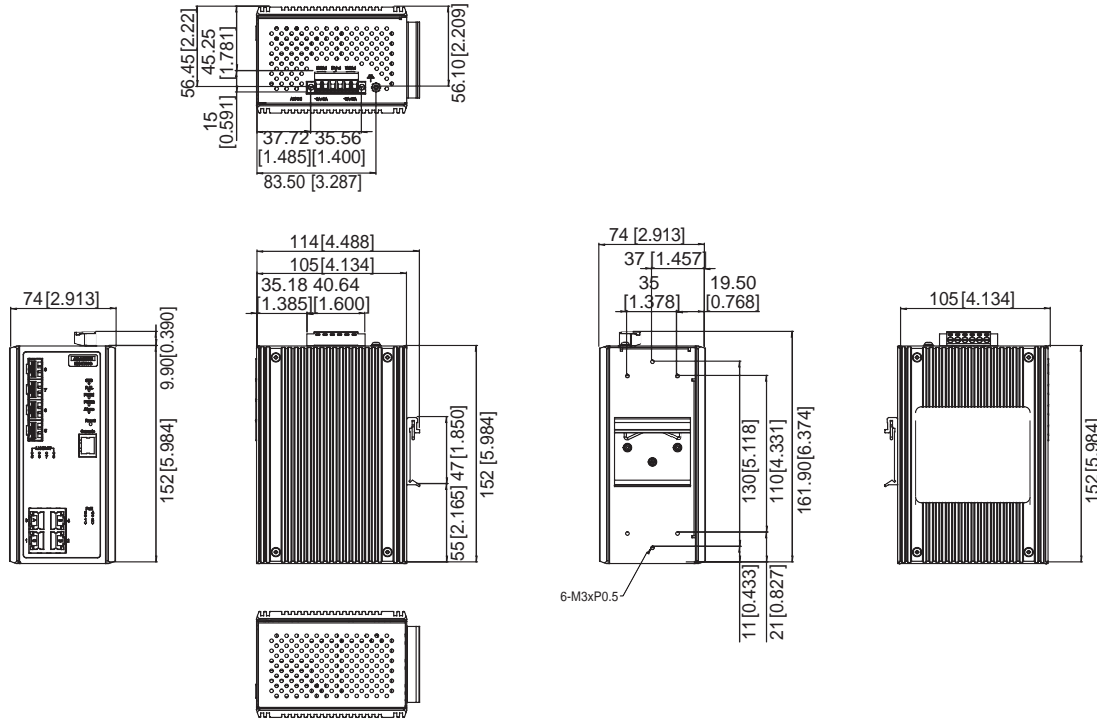
Panel Cut-out Dimensions (W x H x D): 74 x 152 x 105 mm (2.913 x 5.98 x 4.134 inch)

L2 Features

③
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 802.1s-MSTP, 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
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/TTLS/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.

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