EKI-7708G-4F
EKI-7708G-4FI

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

Features

- ③ 4 x Gigabit 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-7708G-4FI)
- ③ Dual 12 ~ 48 V_{DC} power input and 1 x relay output

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

Introduction

The EKI-7708G-4F and EKI-7708G-4FI provide users with abundant port options for connecting to various device types with 4 Gigabit ports and 4 SFP (mini-GBIC) ports. These switches are embedded with Advantech's IXM function, which can benefit users with fast deployment and a marked reduction in 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 to ensure network stability. The EKI-7708G-4FI in particular also features a wide operating temperature range of -40 to 75°C and a NEMA TS2 rating, making it ideal for use in traffic applications. Furthermore, these switches meet the EN50121-4 European railway standard requirement for emissions and railway platform and trackside deployment.

Specifications

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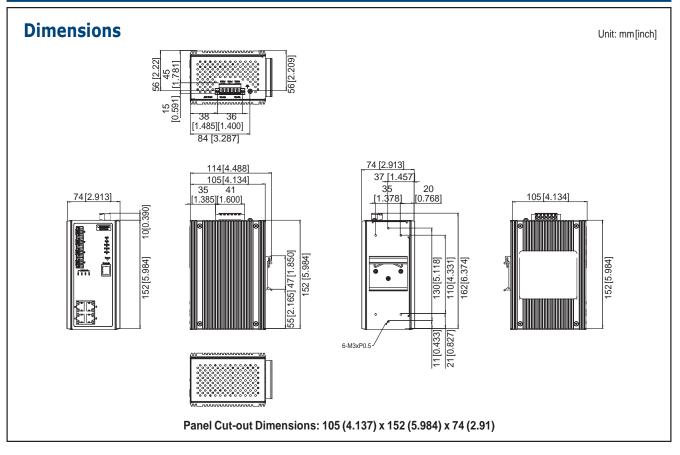
③ **I/O Port**	4 x 10/100/1000BASE-T/TX RJ-45	
	4 x SFP (mini-GBIC) port	
③	**Console port**	RS-232 (RJ45)
③	**Power Connector**	6-pin screw
Terminal Block (including relay)		

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) (7708G-4FI)		
	-10 ~ 60°C (-40 ~ 140°F) (7708G-4F)	
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**	12 ~ 48 V_{DC},
redundant dual power input		
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		

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 802.1s-
MSTP, IEEE		
	802.1w-RSTP, X-Ring Pro, with ultra high-speed recovery time less than 20ms	

Dimensions

Unit: mm [inch]

Panel Cut-out Dimensions: 105 (4.137) x 152 (5.984) x 74 (2.91)

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 Encryption), TACACS+

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-4FI-AE** 4GE + 4G SFP Port Managed Ethernet Switch w/Wide Temp
③ **EKI-7708G-4F-AE** 4GE + 4G SFP Port Managed Ethernet Switch

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