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

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

Features

- 4 Gigabit ports + 4 SFP ports
- SFP socket for Easy and Flexible Fiber Expansion
- Redundancy: X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D)
- IXM function enables fast deployment
- Security: 802.1x (Port-Based, MD5/TLS/TTLS/PEAP Encryption), RADIUS
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB, Private MIB
- NEMA TS2 for Traffic Control
- EN50121-4 approval for Railway trackside deployment
- -40 ~ 75°C wide-range operating temperature (EKI-7708G-4FI)
- Dual 12 ~ 48 V_{DC} power input and 1 relay output

Introduction

EKI-7708G-4F/4FI provides users with abundant ports to connect to many devices with 4 Gigabit ports and 4 SFP (mini-GBIC) ports. It is embedded with Advantech's IXM function, which can benefit users for fast deployment and can dramatically save engineers time and cost. The EKI-7708G series also support NMS to help IT managers with networking maintenance and failure prevention. Finally, the EKI-7708G series is equipped with X-Ring Pro which can achieve ultra high speed recovery time of less than 20 ms to ensure network stability. The switch also features a wide -40° to 75°C operating temperature (EKI-7708G-4FI) and NEMA TS2 rating, making the switch an ideal solution for use in traffic applications. EKI-7708G-4F/4FI has successfully passed the EN50121-4 European railway standard requirement for emissions and railway platform and trackside deployment.

Specifications

Interface

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

Physical

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

LED Display

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

Environment

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

Power

- **Power Consumption**: 12.1W @ 48V_{DC} (System)
- **Power Input**: 12 ~ 48 V_{DC}, redundant dual power input
- **Fault Output**: 1 Relay Output

Certification

- **EMI**: CE, FCC Class A
- **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*
- **Shock**: IEC 60068-2-27
- **Freefall**: IEC 60068-2-32
- **Vibration**: IEC 60068-2-6
- **Traffic control**: NEMA TS2*

*= Compliant

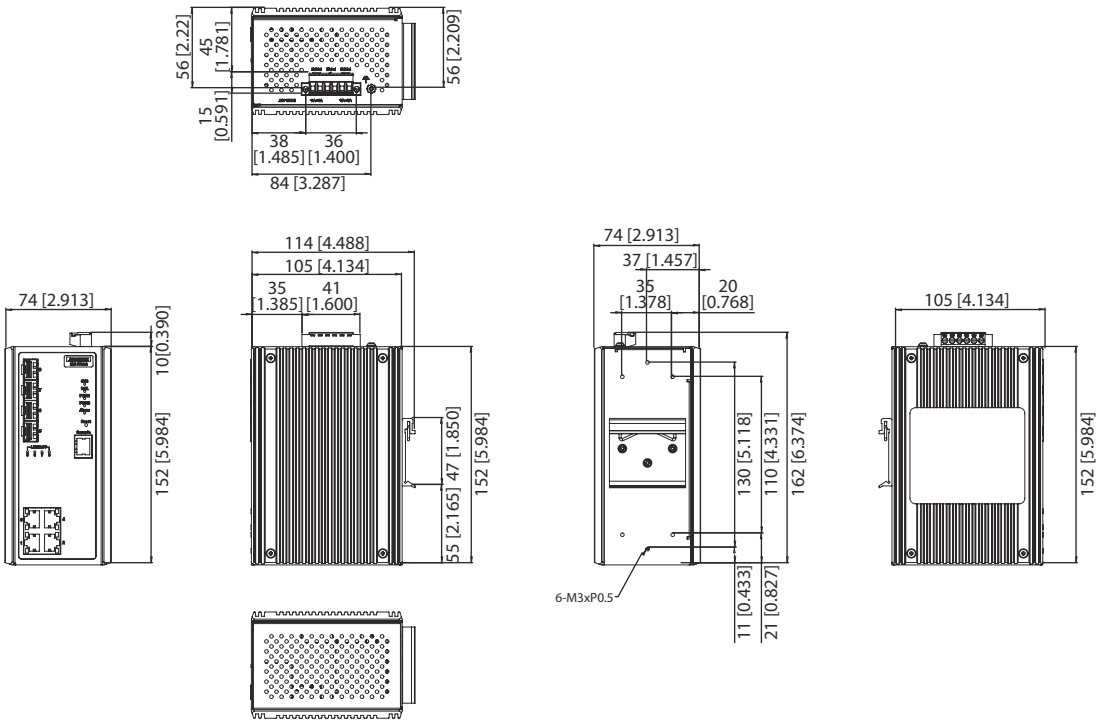
L2 Features

- **L2 MAC Address**: 8K
- **Jumbo Frame**: 9216 Bytes
- **VLAN Group**: 256 (VLAN ID 1 ~ 4094)
- **VLAN Arrange**: Port based VLAN, Q-in-Q (VLAN Stacking), GVRP
- **Port Mirroring**: Per port, Multi-source port,
- **IP Multicast**: IGMP Snooping v1/v2/v3, MLD Snooping, IGMP Immediate leave
- **Storm Control**: Broadcast, Multicast, Unknown unicast
- **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

Last updated: 21-Nov-2017

Dimensions

Unit: mm [inch]



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

QoS

- **Priority Queue Scheduling** — WRR (Weighted Round Robin), SP (Strict Scheduling Priority) Hybrid Priority
- **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
- **Authentication** — 802.1x (Port-Based, MD5/TLS/TTLS/PEAP Encryption)

Management

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

Ordering Information

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