

# EKI-7708G-2MI/2SI

## 6G+2G Multi/Single-Mode SC Fiber Port Industrial Managed Ethernet Switch



### Features

- Provides 6 x 10/100/1000 Mbps Ethernet ports with RJ45 connector
- Provides 2 x 1000 Mbps fiber ports with SC type connector for 1000Base-SX/LX device
- 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, and Console
- Supports redundant 12 ~ 48 VDC and 24VAC power input
- Provides flexible mounting: DIN-rail and wall mount

### Introduction

Advantech's EKI-7708G-2MI/2SI are cost effective managed industrial Ethernet switches which support Gigabit Ethernet via built in fiber optic ports. These solutions feature embedded IXM functions to hasten deployment and reduce engineering time/costs. These switches extend transmission distances beyond the 100 m (328 ft) copper cable limitations using fiber port — they support 550 m (1804 ft) in multi-mode and 10 km (6.21 mi) in single mode. The EKI-7708G-2MI/2SI series supports WebAccess/NMS to aid in network maintenance and failure prevention. These managed Ethernet switches deliver ultra-high speed recovery times of <20 ms using X-Ring Pro to ensure network stability. This solution supports broad operating temperatures (-40 ~ 75 °C / -40 ~ 167 °F), for use in traffic applications.

### Specifications

#### Communications

- **Standard** IEEE 802.3, 802.3u, 802.3ab, 802.3x, & 802.3z
- **LAN** 10/100/1000Base-T (X), 1000Base-SX or 1000Base-LX
- **Switching Capacity** 16 Gbps
- **Transmission Rate** 11.9 Mpps
- **Transmission Distance** Ethernet: Up to 100 m (328 ft)  
Fiber:  
Multi-mode: Up to 550 m (1804 ft) (EKI-7708G-2MI)  
Single-mode: Up to (6.21 mi) (EKI-7708G-2SI)
- **Transmission Speed** Up to 1000 Mbps
- **Optical Fiber**  
Multi-mode (EKI-7708G-2MI)  
Wavelength: 850 nm  
Tx Power: -4/-9.5 dBm  
Rx Sensitivity: -18 dBm  
Parameters: 50/125 um, 62.5/125 um  
Single-mode (EKI-7708G-2SI)  
Wavelength: 1310 nm  
Tx Power: -3/-9.5 dBm  
Rx Sensitivity: -20 dBm  
Parameters: 9/125 um

#### Interface

- **Connectors** 6 x RJ45  
2 x SC Type fiber connector  
6-pin Removable screw terminal (power & relay)
- **LED Indicators** P1, P2, P-Fail  
Fiber: LNK/ACT  
Ethernet: 1000M, LNK/ACT

#### Power

- **Power Consumption** 7W
- **Power Input** 12 ~ 48 V<sub>DC</sub>, 24 V<sub>AC</sub> (18 ~ 30 V<sub>AC</sub>), redundant dual inputs

#### Mechanical Specifications

- **Dimensions (W x H x D)** 59.6 x 152 x 105 mm (2.35 x 5.98 x 4.13 in)
- **Enclosure** IP30, Metal shell with solid mounting kits
- **Mounting** DIN-rail, Wall

#### Protection

- **Power Reverse** Present
- **Overload Current** Present

#### Environment

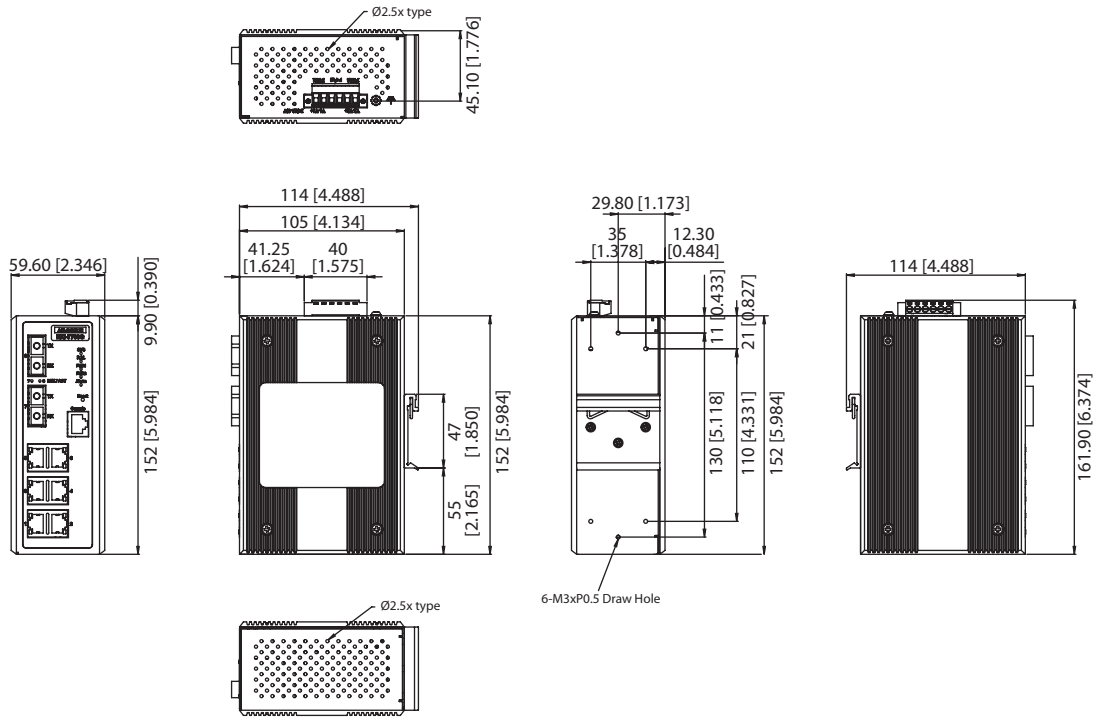
- **Operating Temperature** -40 ~ 75 °C (-40 ~ 167 °F)
- **Storage Temperature** -40 ~ 85 °C (-40 ~ 185 °F)
- **Operating Humidity** 10 ~ 95% (non-condensing)
- **Storage Humidity** 10 ~ 95% (non-condensing)

#### Certification

- **EMI** CE, FCC Class A, EN LVD 62368
- **EMS** EN 61000-4-2  
EN 61000-4-3  
EN 61000-4-4  
EN 61000-4-5  
EN 61000-4-6  
EN 61000-4-8
- **Shock** IEC 60068-2-27
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6

## Dimensions

Unit: mm [inch]



**Panel Cut-out Dimensions (W x H x D): 59.6 x 152 x 105 mm (2.35 x 5.98 x 4.13 in)**

### L2 Features

- **L2 MAC Address** 8K
- **Jumbo Frame** 9216 Bytes
- **VLAN Group** 256 (VLAN ID 1 ~ 4094)
- **VLAN Arrangement** 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, and unknown unicast
- **Redundancy** IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring Pro, with ultra high-speed recovery time of less than 20ms

### Ordering Information

- **EKI-7708G-2MI-AE** 6G+2G Multi-mode SC Fiber Managed Ethernet Switch with wide temperature operation
- **EKI-7708G-2SI-AE** 6G+2G Single-mode SC Fiber Managed Ethernet Switch with wide temperature operation