

# EKI-7712G-4FMPI

## 6G PoE + 2G 90W PoE + 4G SFP Ports Gigabit Managed Redundant Industrial PoE Switch



### Features

- Support 2 IEEE 802.3bt class 8 90W and 6 IEEE 802.3af/at PoE ports
- 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 TS-2 for traffic control
- EN50121-4 approval for railway trackside deployment
- -40 ~ 70°C wide-range operating temperature
- Dual 55 V<sub>DC</sub> power inputs and 1 x relay output

### Introduction

The EKI-7712G-4FMPI is a next generation PoE switch which supports IEEE 802.3bt Class 8 90W PoE for high-powered application. Combined with 6 x IEEE 802.3af/at PoE Gigabit ports, 2 x IEEE 802.3bt PoE Gigabit ports, and 4 x SFP ports, EKI-7712G-4FMPI provides multiple usages for different scenarios. The EKI-7712G-4FMPI is embedded with Advantech's IXM function, which can benefit users with fast deployment and can save considerably engineering time and costs. It also supports NMS to help IT managers with networking maintenance and failure prevention. It is also equipped with X-Ring Pro, which can achieve ultra-high-speed recovery times of <20 ms to ensure network stability.

### Specifications

#### Interface

- I/O Port 8 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, Wall-mount kit
- Dimensions (W x H x D) 97 x 152 x 105 mm (3.819" x 5.984" x 4.134")

#### LED Display

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

#### Environment

- Operating Temperature -40 ~ 70°C (-40 ~ 158°F)
- Storage Temperature -40 ~ 85°C
- Ambient Relative Humidity 10 ~ 95% (non-condensing)
- Humidity 10 ~ 95% (non-condensing)

#### Power

- Power Consumption 12W @ 55V<sub>DC</sub> (System)
- Power Input 55V<sub>DC</sub> (Support 48-57VDC range)  
53-57V<sub>DC</sub> for 802.3at Full-load  
55-57V<sub>DC</sub> for 802.3bt Full-load
- Power Budget 370W
- Fault Output 1 Relay Output

#### Certification

- Safety UL 62368-1\*
- EMI CE, FCC Class A
- 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
- Traffic control NEMA TS-2\*
- Railway Track Side EN50121-4\*
- Patent <http://www.advantech.com/legal/patent>

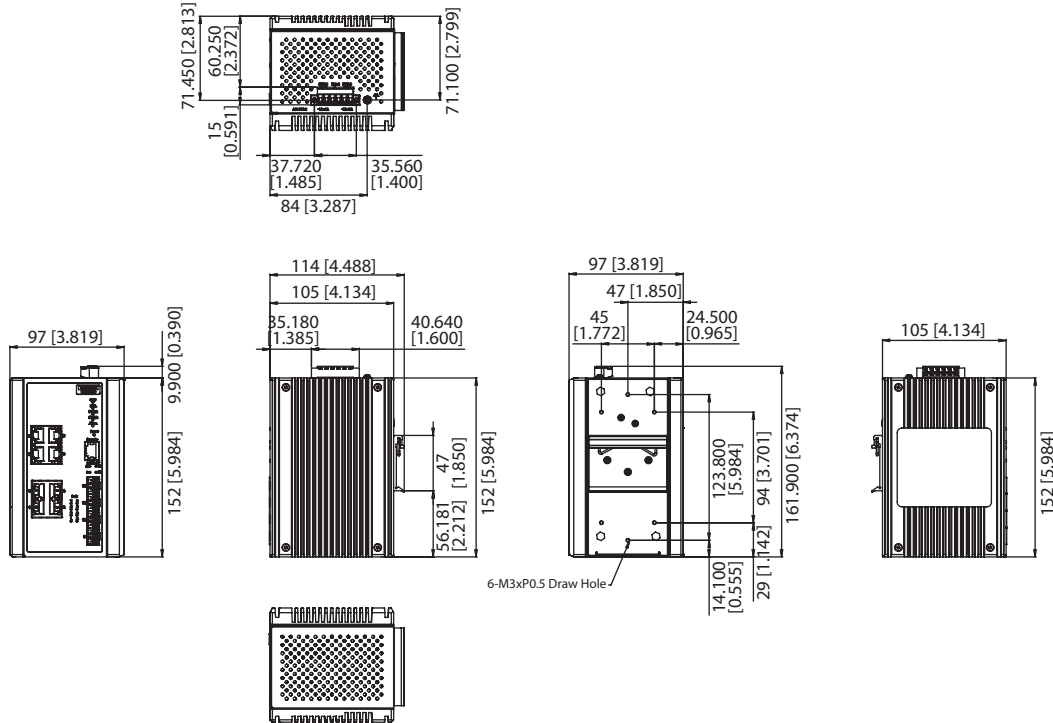
\*=Compliant

#### 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

## Dimensions

Unit: mm [inch]



**Panel Cut-out Dimensions (W x H x D): 97 x 152 x 105 mm (3.819 x 5.984 x 4.134 inch)**

### 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 IP Source Guard, ARP Spoofing Prevention, Access Control List, DHCP Snooping,
- **Authentication** 802.1x (Port-Based), MD5/TLS/TTLS/PEAP Encryption), TACACS+

### 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-7712G-4FMPI-AE** 6G PoE + 2G 90W PoE + 4G SFP PoE Managed Switch w/Wide Temp