EKI-7712G-4FMPI

6G PoE + 2G Mega PoE + 4G SFP Port Gigabit Managed Redundant Industrial Mega PoE Switch

Preliminary

Features

- Support IEEE 802.3bt Class 8 90W Mega PoE, 6 x IEEE 802.3 af/at PoE Gigabit ports + 2 x IEEE 802.3 bt PoE 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 ~ 70°C wide-range operating temperature
- Dual 48 V_{DC} power input 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 802.3 af/at PoE Gigabit ports, 2 x 802.3 bt PoE Gigabit ports, and 4 x SFP ports, EKI-7712G-4FMPI provides multiple usage for different scenario. 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. The series are 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
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

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Power Consumption	20W @ 48V_{DC} (System)
Power Input	48 V_{DC} (46 to 57 V_{DC}),
	53 -57 V_{DC} is recommended for 802.3at and 802.3bt, redundant dual power input
Power Budget	370W
Fault Output	1 Relay Output

Certification

Safety	UL 61010
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 TS2
Railway Track Side	EN 50121-4
Patent	http://www.advantech.com/legal/patent

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]
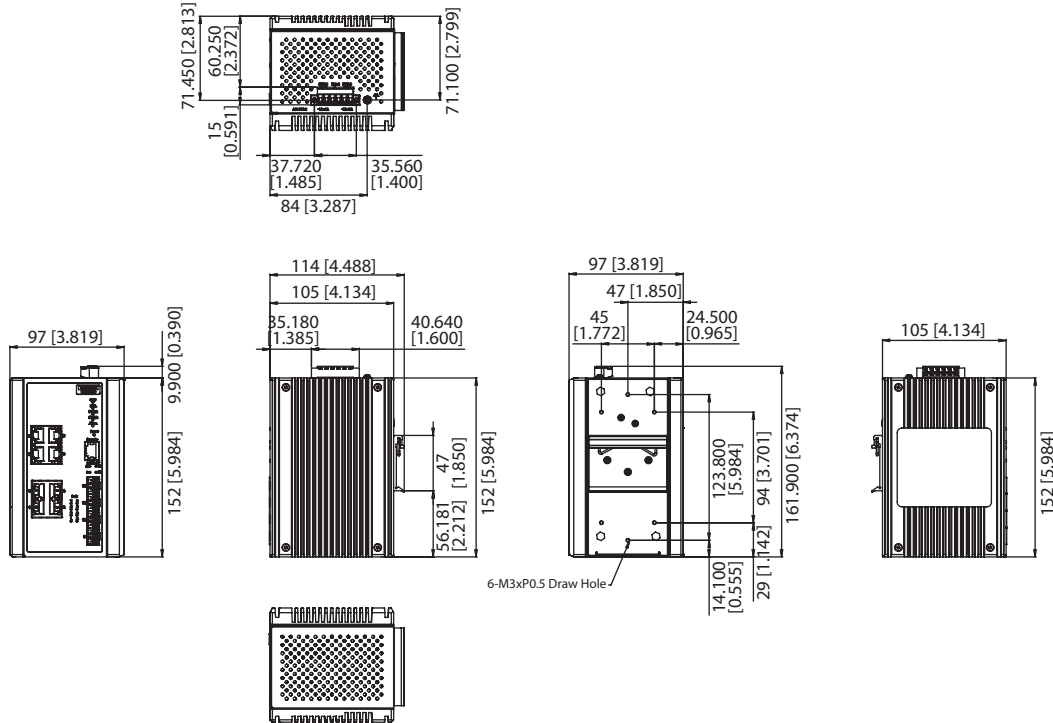
Panel Cut-out Dimensions: 105 x 152 x 97 (4.134" x 5.98" x 3.819")

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 Mega PoE + 4G SFP PoE Ethernet Switch w/Wide Temp