EKI-7720G-4FPI

16GE PoE + 4G SFP Ports Managed Redundant Industrial PoE Switch

Features

- 16 IEEE 802.3af/at PoE ports
- Up to 420W power budget
- 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
- -40 ~ 70°C wide-range operating temperature
- Dual 48 ~ 57V_{DC} power inputs and 1 x relay output

Introduction

The EKI-7720G-4FPI Gigabit managed PoE switch comes with 16 10/100/1000BaseT(X) ports with 802.3af/at supported and 4 Giga SFP ports. It features 16 IEEE802.3af/at PoE ports, -40~70°C operating temperature, and Din-Rail/Wall-Mount installation options, making it ideal for application which requires high-bandwidth transmission, more PoE ports, and Din-Rail installation.

In addition, it is also embedded with Advantech exclusive features like IXM which benefits users for fast deployment and can dramatically save engineers time and costs, X-Ring Pro which achieves ultra-high speed recovery time of less than 20ms to ensure network stability, and Security Pack which protects your network from internal intrusion.

Specifications

Communication

- **Standard** — IEEE 802.3, 802.3u, 802.3x, 802.3z , 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X, 802.3ad, 802.3ab
- **LAN** — 10/100/1000Base-T (X), Optional 100Base-FX, 1000Base-SX/LX/LHX/XD/ZX/EZX
- **Switch Capacity** — 40Gbps
- **Transmission Rate** — 29.7Mpps

Interface

- **Ethernet Port** — 16 x 10/100/1000Base-T(X) RJ45
- **SFP Port** — 4 x SFP (mini-GBIC)
- **Console Port** — RS232(RJ45)
- **Power Connector** — 6-pin screw Terminal Block (including relay)

Physical

- **Enclosure** — Metal Shell
- **Protection Class** — IP30
- **Installation** — Din-Rail , Wall-mount kit
- **Dimension(W x H x D)** — 97 x 152 x 105 mm (3.819" x 5.984" x 4.134")

LED Display

- **System LED** — SYS, R.M., PWR1, PWR2, Alarm
- **Port LED** — Port 1 ~ 16: Link/Activity
  Port 17 ~ 20 SFP: Link/Activity
  PoE: 1 ~ 16 ports

Environment

- **Operating Temperature** — -40~70°C (-40~158°F)
- **Storage Temperature** — -40~85°C (-40~185°F)
- **Humidity** — 5~95% (non-condensing)
- **MTBF** — 1,343,056 hours

Power

- **Power Input** — 48 ~ 57V_{DC} for 802.3af
  53 ~ 57V_{DC} for 802.3at
- **System Consumption** — 16W
- **PoE Total Power Budget** — 420W

Certification

- **Safety** — IEC/EN 62368*
- **EMC** — 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
- **Vibration** — IEC 60068-2-6
- **Free Fall** — IEC 60068-2-32

= Compliant

L2 Feature

- **L2 MAC Address** — 8K
- **Jumbo Frame** — 9KB
- **VLAN group** — 256 (VLAN ID 1~4094)
- **VLAN group** — 802.1Q, GVRP, GMRP, 802.1ad VLAN stacking
- **Port Mirroring** — Per port, Multi-source port (4 Mirroring sessions Max.)
- **IP Multicast** — IGMP snooping v1/v2/v3, MLD snooping(256 Multicast Entries Max.)
- **Storm Control** — Broadcast, Multicast, Unknown unicast
- **Redundant Protocol** — IEEE 802.1D(STP), IEEE802.1s(MSTP), IEEE802.1w(RSTP), X-Ring Pro, X-Chain, Dual homing, Coupling, ERPS G.8032

Dimensions

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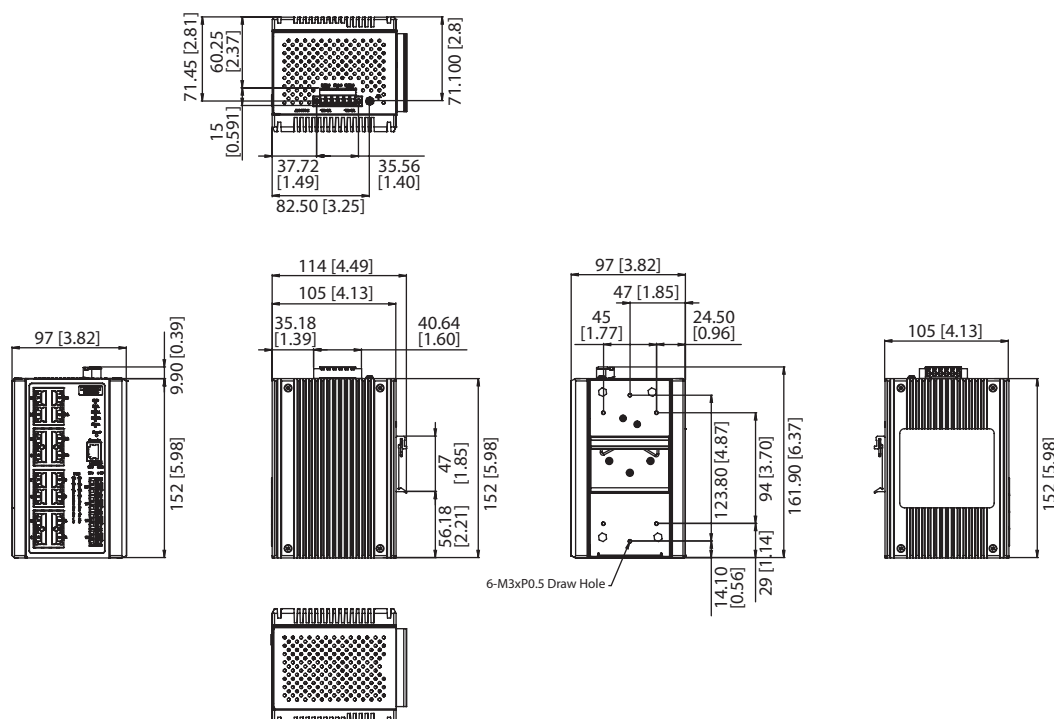
Panel Cut-out Dimensions (W x H x D): 97 x 152 x 105 mm (3.819 x 5.984 x 4.134 inch.)

Quality of Service

- **QoS function** — Scheduling(STRICT/ WRR), Port Priority, 802.1p, DSCP, IP TOS/ precedence
- **Rate limit** — Ingress/ Egress Rate limit
- **Max Priority Queues** — 8

Security

- **Port Security** — Static MAC, MAC violation notice, port-based loop detection
- **Authentication** — 802.1x (Port-based, MAC-based), RADIUS, TACACS+
- **Security Pack** — IP source guard, DoS attack prevention, DHCP snooping, ARP spoofing prevention, L2/ L3/ L4 ACL (Access Control List)

Management feature

- **DHCP** — Client, Server, Option66/67/82, Port IP-Binding
- **Access** — SNMP v1/v2c/v3, WEB, Telnet, Console, RMON, Standard MIB, Private MIB
- **Security Access** — SSH (v2), SSL (v2), HTTPs
- **Software upgrade** — TFTP, HTTP, Dual Image
- **NTP** — NTP server/ client, SNTP
- **Other** — IPv4, IPv6, Modbus TCP, IXM, N-Key for config file backup/ restore

Ordering Information

- **EKI-7720G-4FPI-AE** — 16GE PoE + 4G SFP Manged PoE Switch w/Wide Temp.