EKI-7710E-2CP
EKI-7710E-2CPI

8FE+2G Port Managed Redundant Industrial PoE Switch

Features

- 8 x Fast Ethernet ports + 2 x Gigabit Copper/SFP combo ports
- Support 8 x IEEE 802.3at/af PoE ports for PD demands
- Redundancy: X-Ring Pro (ultra-high-speed recovery time, <20 ms), RSTP/STP (802.1w/1D)
- IXM function for fast deployment
- Security Pack with 802.1X, ACL, RADIUS, TACACS+, MAB Authentication, SNMPv3, HTTPS, SSH, and SFTP
- Management: SNMP v1/v2c/v3, WEB, Telnet, standard MIB, private MIB
- Supports NMS for easy and visualized to monitor and manage network remotely
- Dual 24 ~ 48 V_{DC} power input and 1 x relay output

Introduction

The EKI-7710E-2CP/2CPI support 8 PoE ports and 2 Gigabit combo ports. They can provide up to 30 W per port for high-power-consumption powered devices. They also features Advantech's IXM function, which can benefit users with fast deployment and can save considerably on engineering time and cost. The series also support NMS to help IT managers with networking maintenance and failure prevention. Finally, they are equipped with X-Ring Pro, which can achieve ultra-high-speed recovery times of <20 ms, thus ensuring network stability.

Specifications

Interfaces / Communications

- **I/O Port**
  8 x 10/100BASE-T/TX RJ-45
  2 x 10/100/1000BASE-T/TX or SFP (mini-GBIC) Combo ports
  Auto-Negotiation, Full/Half Duplex Mode
  Auto MDI/MDI-X Connection
- **Standards**
  IEEE 802.3 for 10BaseT
  IEEE 802.3u for 100BaseT(X)/FX
  IEEE 802.3ab 1000BaseT(X)
  IEEE 802.3z for 1000BaseSX/LX/LHX/ZX
  IEEE 802.3x for Flow Control
- **PoE** Port 1 ~ Port 8: IEEE 802.3at/af
- **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
- **Dimensions (W x H x D)** 74 x 152 x 105 mm (2.91" x 5.98" x 4.13")

LED Indicators

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

Environment

- **Operating Temperature** -40 ~ 75°C (-40 ~ 167°F) (EKI-7710E-2CPI)
  -10 ~ 60°C (-40 ~ 140°F) (EKI-7710E-2CP)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Ambient Relative Humidity** 5 ~ 95% (non-condensing)
- **Overload Current Protection** Present
- **Reverse Polarity Protection** Present
- **MTBF** 846,513 hours

Power

- **Power Consumption** 12.1W @ 48V_{DC} (System)
- **Power Input** 24 ~ 48 V_{DC}, redundant dual power input
- **Power Budget** 120W
- **Fault Output** 1 Relay Output

Certification

- **Safety** UL 62368
- **EMI** CE, CISPR 32, FCC Part 15B 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
- **EMC** EN 61000-6-2
  EN 61000-6-4
- **Shock** IEC 60068-2-27
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 60068-2-6
- **Traffic control** NEMA TS-2
- **Railway Trackside** EN 50121-4
- **Security** IEC 62443-4-2 SL2

Switch Properties

- **Switch Capacity** 5.6Gbps
- **Transmission Rate** 4.17Mpps
- **MAC Table Size** 8K
- **Jumbo Frame** 1,0240 Bytes
- **Packet Buffer Size** 4.1Mb
- **Max. IGMP Group** 256
- **Max. VLAN Group** 256 (VLAN ID 1 ~ 4094)

Dimensions

Unit: mm [inch]
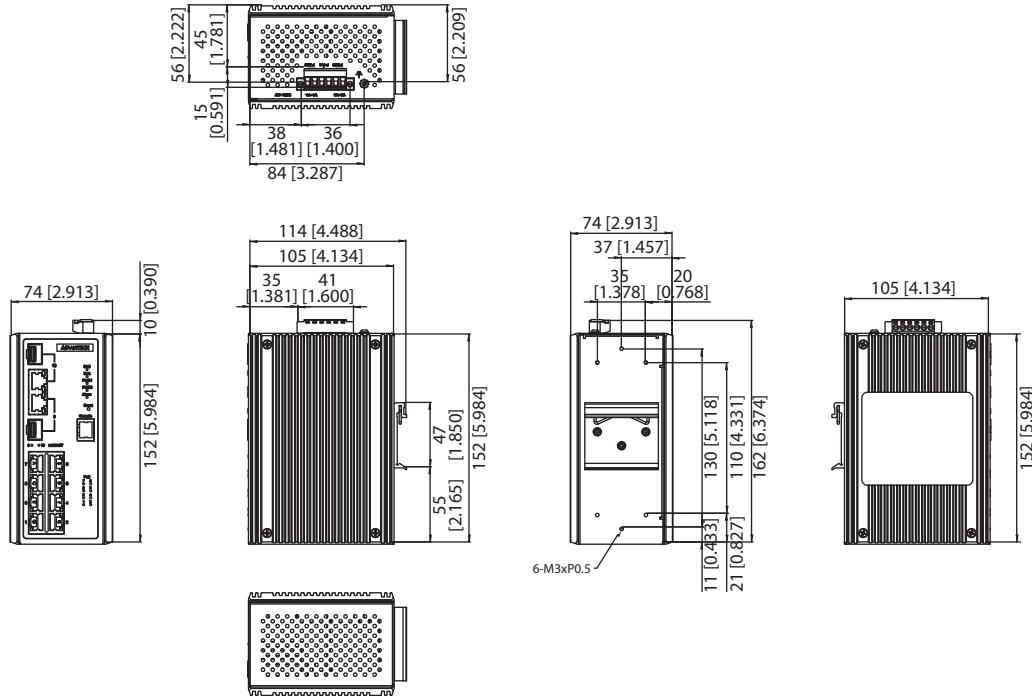
Panel Cut-out Dimensions: 105 (4.137) x 152 (5.984) x 74 (2.91)

L2 Features

- **VLAN Arrange** — 802.1Q Tag-based VLAN, 802.1ad QinQ VLAN Stacking
- **Port Mirroring** — 1 to 1, N to 1
  Max. Mirror Session: 4
- **RSPAN** — Remote Switched Port Analysis
- **GARP** — GVRP, GMRP
- **IP Multicast** — IGMP Snooping v1/v2/v3, MLD Snooping, IGMP Immediate leave
- **Storm Control** — Broadcast, Multicast, Unknown unicast
- **LLDP** — 802.1ab LLDP, LLDP-MED
- **Industrial Protocol** — Modbus/TCP
- **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, ERPS(G.8032)

QoS

- **Priority Queue Scheduling** — WRR (Weighted Round Robin), SP (Strict Scheduling Priority) Hybrid Priority, Max. Priority Queues: 8
- **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 MAC, Max. Learning Limit, MAC Violation Notice
- **802.1X** — Port-based/MAC-based Authentication (MD5/PEAP/TLS/TTLS Encryption)
- **MAB** — MAC Authentication Bypass
- **Authentication** — RADIUS, TACAS+
- **IP Security** — IP Source Guard, DHCP Snooping, ARP Spoofing Prevention
- **ACL** — Access Control List (IP-ACL, MAC-ACL)
  Max. ACL Entries: 128

Management

- **PoE** — PoE system settings, port settings and status
- **DHCP** — Client, Server, Option66/67/82, DHCP Relay
- **Access** — SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB-II, Private MIB, Ethernet-Like MIB, RMON MIB (Group 1, 2, 3, 9)
- **Security Access** — SSH2.0, SSL
- **Software Upgrade** — TFTP, SFTP, HTTP, Dual Image
- **NTP** — SNTP client

Ordering Information

- **EKI-7710E-2CPI-BE** — 8FE + 2G Combo Port Managed PoE Ethernet Switch w/Wide Temp

Note: For SFP copper type, only 1000Mbps supported.