

# EKI-7710G-2CPI

8GE+2G Port Gigabit Managed  
Redundant Industrial PoE Switch



## Introduction

The EKI-7710G-2CPI support 8 Gigabit PoE ports and 2 Gigabit combo ports. They provide up to 30W per port for high-power-consumption powered devices. They come embedded with Advantech IXM function, which can benefit users with fast deployment and can dramatically save considerably on engineering time and costs. The EKI-7710G 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 10/100/1000BASE-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/LH/X/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)
- 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

## Features

- 8 x Gigabit 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<sub>DC</sub> power input and 1 x relay output

### Power

- Power Consumption**  
12.1W @ 48V<sub>DC</sub> (System)
- Power Input**  
24 ~ 48 V<sub>DC</sub>, 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

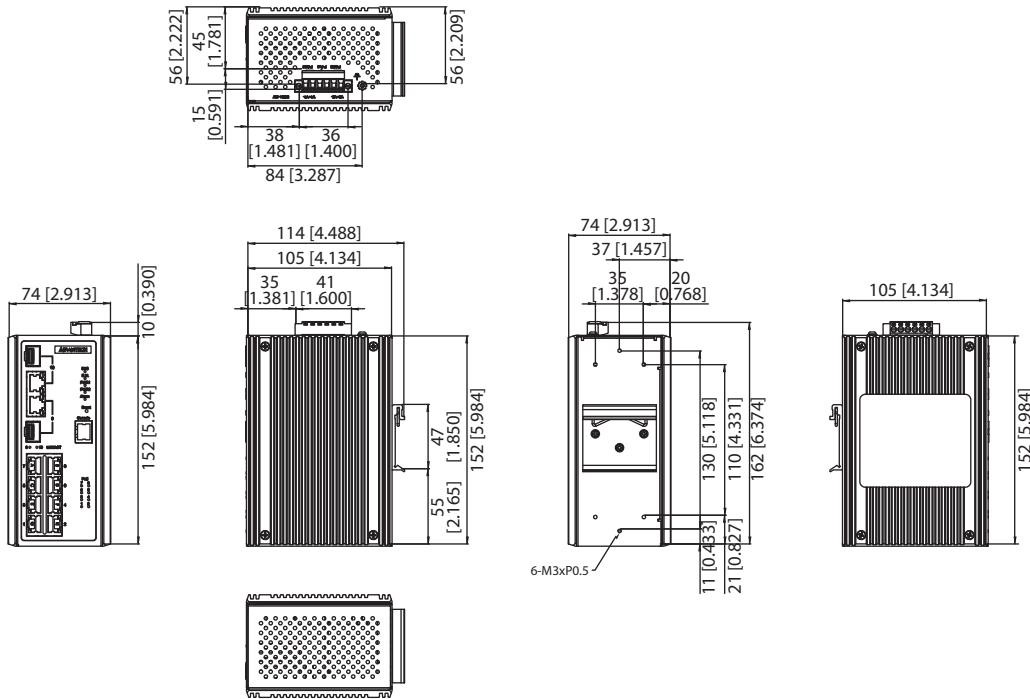
- Security**  
IEC 62443-4-2 SL2

### Switch Properties

- Switch Capacity**  
20Gbps
- Transmission Rate**  
14.8Mpps
- 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-7710G-2CPI-BE** 8GE + 2G Combo Port Managed PoE Ethernet Switch w/Wide Temp

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