EKI-7428G-4CI
EKI-7428G-4CPI

24G+4G Combo port L2 Managed Switch

24G+4G Combo port L2 Managed PoE Switch

Features

- 24 x IEEE 802.3 af/at PoE Gigabit ports + 4 x Gigabit Copper/SFP combo ports, provide up to 30Watts per port
- SFP socket for Easy and Flexible Fiber Expansion
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB
- IXM function enables fast deployment
- Security:802.1x (Port-Based, MD5/TLS/TTLS/PEAP Encryption),HTTPS,SSH and SNMPv3
- Redundancy: Gigabit X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D),MSTP
- 48V$_{DC}$ power input (46-57 V$_{DC}$ for POE af , 53 -57 V$_{DC}$ is recommended for at) and 2 relay output
- -40 ~ 70°C wide-range operating temperature
- Support Security Pack to against internal and external cyber threats

Introduction

The EKI-7428G is an industrial-class layer 2 full managed switch including 24 Gigabit ports and 4 Gigabit combo ports. It is designed for rack-mount installation, and can be deployed in demanding industrial environments. It is suitable for edge to core industrial networks. It integrates Layer 2 switching software, which is optimized for scale and performance, delivering wire speed across all ports up to 56 Gbps for layer 2 traffic forwarding. In addition, the PoE design provides up to 30 watts per port to fulfill high power consumption device, moreover, it supports high reliability with -40 ~ 70°C operating temperatures, and dual 48 V$_{DC}$ input power design ensure vital network capabilities with minimum downtime. It is also embedded with Advantech IXM, which benefits users by giving them fast deployment and can dramatically save engineer's time and costs.

Specifications

Communications

- **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
- **Transmission Distance**: Ethernet: Up to 100 m (4- wire Cat.5e, Cat.6 RJ45 cable suggested for Gigabit port) SFP: Up to 110 km (depends on SFP)
- **Transmission Speed**: Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps

Interface

- **Connectors**: 24 x RJ45 (Ethernet) 4 x RJ45/SFP (mini-GBIC) combo ports 4-pin removable screw terminal (Power) 3-pin removable screw terminal (Relay)
- **LED Indicators**: 10/100T (X): Link/Activity, Duplex/Collision Gigabit Copper: Link/Activity, Speed (1000 Mbps) SFP: Link/Activity
- **Console**: RS-232 (RJ45)

Network Management

- **Configuration**: Web browser, Telnet, Serial console, TFTP, SNMPv1/ v2c/v3, Port Speed/Duplex Configuration, IPv6
- **Switching**: Switching Capacity 56 Gbps Forwarding Rate 41.6 Mpps MAC Address 8K Jumbo Frame 9K VLAN Group 256 (VLAN ID 1 ~ 4094) Packet Buffer 4.1 Mbit
- **VLAN**: IEEE 802.1Q, GVRP, Port-based VLAN
- **Redundancy**: Advantech X-Ring, 802.1w/1D/1s RSTP/STP/MSTP
- **Security**: IP Security, SSH, SSL, SNMPV3, HTTPS, IP Source Guard, DHCP Snooping, ARP Spoofing Prevention, 802.1X, TACACS+, Access Control List
- **Traffic Control**: IGMP Snooping/Query for multicast group management, Port Trunking, Static/802.3ad, LACP Rate limit and storm control, IEEE 802.1p QoS CoS/TOS/DSCP priority queuing, IEEE 802.3x flow control
- **Diagnostics**: Port Mirroring, Real-time traffic statistic, MAC Address Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON

Mechanism

- **Enclosure**: IP30, metal shell with solid mounting kits
- **Dimensions (W x H x D)**: 438 x 43.6 x 259.20 mm (17.24" x 1.72" x 10.2")
- **Mounting**: 1U 19" Rack mount

Dimensions

Unit: mm [inch]
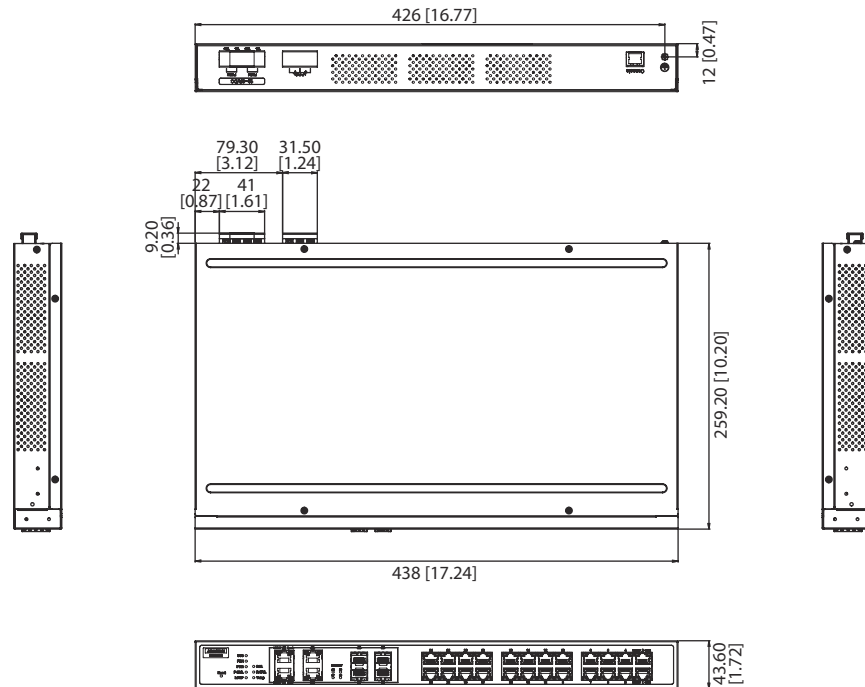
Power

- **Power Consumption** 20W @ 24V (EKI-7428G-4CI)
  20W @ 48V (EKI-7428G-4CPI)
- **Power Budget** 685W (EKI-7428G-4CPI)
- **Power Input** EKI-7428G-4CI 12-48 V_{DC}
  EKI-7428G-4CPI 48 V_{DC} (46 to 57 V_{DC}),
  53 -57 V_{DC} is recommended for 802.3at
- **Fault Output** 2 Relay Outputs

Protection

- **Power Reverse** Present
- **Overload Current** Present

Environment

- **Operating Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 10 ~ 95% (non-condensing)
- **Storage Humidity** 10 ~ 95% (non-condensing)
- **MTBF** EKI-7428-4CI: 787,940 hours
  EKI-7428G-4CPI: 424,517 hours

Certification

- **Safety** UL 61010-2-201
- **EMI** CE FCC EN55022 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
- **Railway Track Side** EN 50121-4
- **Patent** http://www.advantech.com/legal/patent

Ordering Information

- **EKI-7428G-4CI-AE** 24GE+4G Combo Port Managed Ethernet Switch
  w/ Wide Temp
- **EKI-7428G-4CPI-AE** 24G+4G Combo Port POE Managed Ethernet Switch
  w/ Wide Temp

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