EKI-7716G-4F4C
EKI-7716G-4F4CI

8GE+4SFP+4G Combo port Managed Redundant Industrial Switch

Features

- 8 Gigabit Ethernet + 4 x Gigabit SFP + 4 x Gigabit Copper/SFP combo ports
- SFP socket for easy and flexible fiber expansion
- Redundancy: X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP and MSTP (802.1w/1D/1s)
- 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 ~ 75°C wide-range operating temperature (EKI-7716G-4F4CI)
- Dual 12 ~ 48 V_{DC} power input and 1 relay output

Introduction

EKI-7716G-4F4C/4F4CI supports 8 Gigabit Ethernet, 4 Gigabit SFP (mini-GBIC), and 4 Gigabit combo ports. It provides abundant ports to connect many devices. EKI-7716G-4F4C/4F4CI is embedded with Advantech IXM function for fast deployment that can dramatically save engineering time and cost. EKI-7716G series also supports NMS to help IT managers with networking maintenance and failure prevention. Finally, the EKI-7716G series is equipped with X-Ring Pro redundancy for ultra high-speed recovery times of less than 20 ms. The switch also features -40 to 75 °C wide temperature operation and NEMA TS2 rating, making the switch an ideal solution for use in traffic applications. EKI-7716G-4F4C/4F4CI also passes the EN50121-4 European railway standard for emissions and EMI immunity for railway platforms and trackside deployment.

Specifications

Communications

- **Standard** — IEEE 802.3, 802.3u, 802.3x, 802.3ad, 802.3ab, 802.3z, 802.1D, 802.1w, 802.1s, 802.1P, 802.1Q, 802.1X
- **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 both Fast Ethernet/Gigabit port) SFP: Up to 110 km (depends on SFP)
- **Transmission Speed** — Gigabit Ethernet: 10/100/1000 Mbps Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps

Interface

- **Connectors** — 8 x RJ45 (Gigabit Ethernet) 4 x SFP (mini-GBIC) 4 x RJ45/SFP (mini-GBIC) combo ports 6-pin screw terminal block connector (4-pin for Power, 2-pin for Relay)
- **LED Indicators** — PWR1, PWR2, SYS, Alarm and R.M. 10/100/1000T (X): Link/Activity, 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
- **VLAN** — IEEE 802.1Q, GVRP, Port-based VLAN
- **Redundancy** — Advantech X-Ring, 802.1w/1D/1s RSTP/STP/MSTP
- **Security** — IP Access Security, Port Security, DHCP Client, Port and IP Binding, 802.1X Port Access Control
- **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)** — 74 x 152 x 105 mm (2.91" x 5.98" x 4.13")
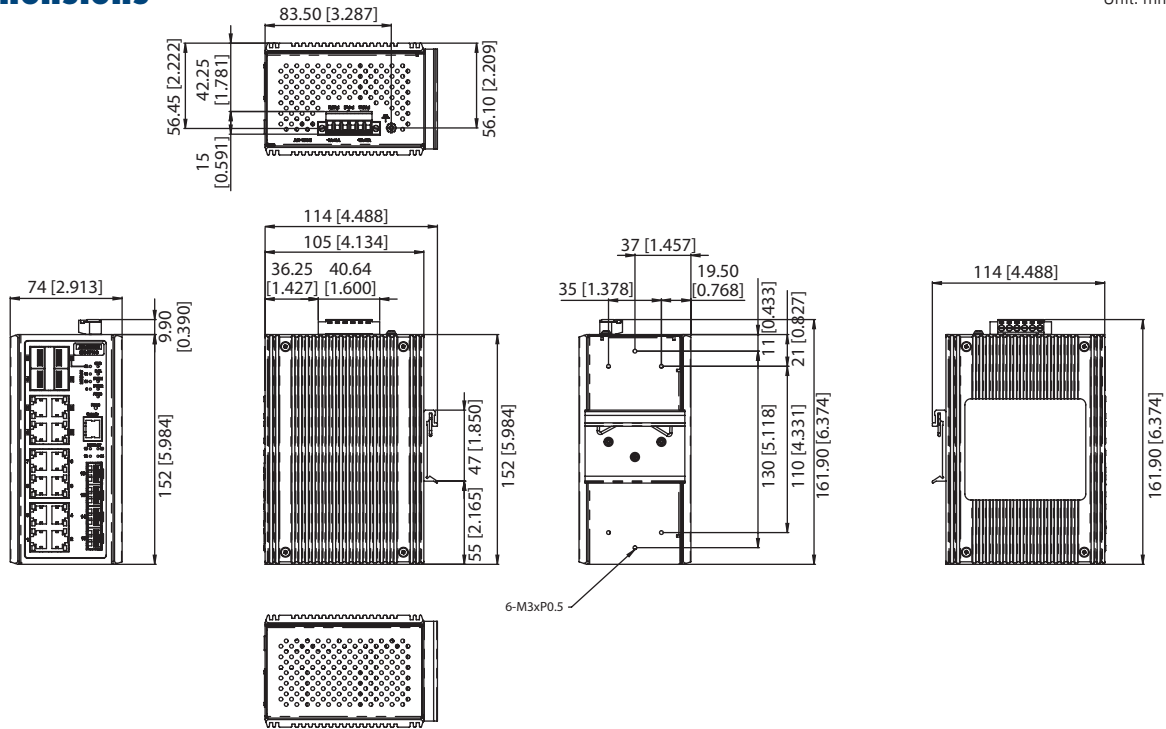- **Mounting** — DIN-rail, Wall mount

Power

- **Power Consumption** — 15W @ 48V (Full Load)
- **Power Input** — 12-48 V_{DC}, Redundant Dual Power Input
- **Fault Output** — 1 Relay Output

Protection

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

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All product specifications are subject to change without notice.   Last updated: 6-Oct-2017

Dimensions

Unit: mm [inch]

Panel Cut-out Dimensions: 74 x 152 x 105 mm (2.91" x 5.98" x 4.13")

Environment

- **Operating Temperature** -10~60°C (14~140°F) (EKI-7716G-4F4C)
  -40~75°C (-40~167°F) (EKI-7716G-4F4CI)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 10 ~ 95% (non-condensing)
- **Storage Humidity** 10 ~ 95% (non-condensing)

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
  EN 50121-4
  NEMA TS2
- **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-7716G-4F4C-AE**   8GE+4SFP+4G Combo port Managed Industrial Switch
- **EKI-7716G-4F4CI-AE**   8GE+4SFP+4G Combo port Managed Industrial Switch w/Wide Temp.