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

8GE+4SFP+4G Combo Port Managed **Redundant Industrial Switch**



Features

- 8 x 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
- Wide operating temperature range of -40 ~ 75°C (EKI-7716G-4F4CI)
- Dual 12 ~ 48 V_{DC} power input and 1 x relay output

Introduction

The EKI-7716G-4F4C and EKI-7716G-4F4CI support 8 Gigabit Ethernet, 4 Gigabit SFP (mini-GBIC), and 4 Gigabit combo ports. They provide abundant port options for connecting to various device types. The series are embedded with Advantech IXM function for fast deployment, which can dramatically save on engineering time and costs. These switches also support NMS to help IT managers with networking maintenance and failure prevention. Finally, they are equipped with X-Ring Pro redundancy for ultra-high-speed recovery times of <20 ms. The EKI-7716G-4F4CI in particular also features a wide operating temperature of -40 to 75°C and a NEMA TS2 rating, making it ideal for use in traffic applications. The EKI-7716G series also meets the EN50121-4 European railway standard for emissions and EMI immunity for railway platforms and trackside deployment.

Specifications

Communications

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	 Configuration 	Web browser, Telner v2c/v3, Port Speed/
10/100/1000BASE-TX, optional 100BASE-FX,	- VLAN	IEEE 802.1Q, GVRP
1000BASE-SX/LX/LHX/XD/ZX/EZX	Redundancy	Advantech X-Ring,
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)	 Security 	IP Security, SSH, S Guard, DHCP Snoo 802.1X, TACACS+,
Gigabit Ethernet: 10/100/1000 Mbps Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps	Traffic Control	IGMP Snooping/Qu Management, Port T Limit and Storm Co DSCP Priority Queu
	 Diagnostics 	Port Mirroring, Rea
8 x RJ45 (Gigabit Ethernet) 4 x SFP (mini-GBIC) 4 x RJ45/SFP (mini-GBIC) combo ports		Address Table, SNT RMON
6-pin screw terminal block connector	Mechanism	
(4-pin for Power, 2-pin for Relay)	Enclosure	IP30, metal shell wi
	 Dimensions (W x H x D) 74 x 152 x 105 mm
Gigabit Copper: Link/Activity, Speed (1000 Mbps)	 Mounting 	DIN-rail, Wall mour
SFP: Link/Activity	Power	
RS-232 (RJ45)	 Power Consumption 	15W @ 48V (Full L
	 Power Input 	12-48 Vpc, Redunda
	 802.1D, 802.1w, 802.1s, 802.1P, 802.1Q, 802.1X 10/100/1000BASE-TX, optional 100BASE-FX, 1000BASE-SX/LX/LHX/XD/ZX/EZX 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) Gigabit Ethernet: 10/100/1000 Mbps Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps 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) PWR1, PWR2, SYS, Alarm and R.M. 10/100/1000T (X): Link/Activity, Gigabit Copper: Link/Activity, Speed (1000 Mbps) SFP: Link/Activity 	 802.1D, 802.1w, 802.1s, 802.1P, 802.1Q, 802.1X 10/100/1000BASE-TX, optional 100BASE-FX, 1000BASE-SX/LX/LHX/XD/ZX/EZX 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) Gigabit Ethernet: 10/100/1000 Mbps Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation Gigabit Fiber: Up to 1000 Mbps 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) PWR1, PWR2, SYS, Alarm and R.M. 10/100/1000T (X): Link/Activity, Speed (1000 Mbps) SFP: Link/Activity RS-232 (RJ45) VLAN VLAN VLAN VLAN VLAN VLAN VLAN VLAN Security Security Traffic Control Traffic Control Mechanism Enclosure Dimensions (W x H x D Mounting Power Power Power Consumption

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 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
lechanism	
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
ower	
Power Consumption	15W @ 48V (Full Load)
Power Input	12-48 V _{DC} , Redundant Dual Power Input

1 Relay Output

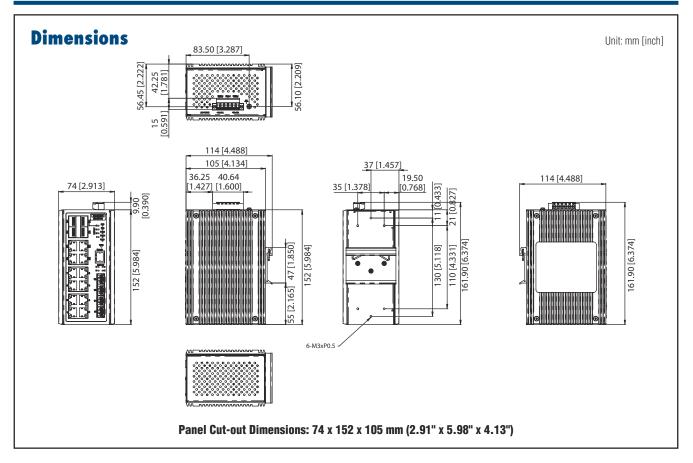
Present

- Fault Output

Protection

- Power Reverse
- Overload Current Present

EKI-7716G-4F4C/4F4CI



Environment

Operating Temperature -10~60°C (14~140°F) (EKI-7716G-4F4C)

UL 61010

CE, FCC Class A 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

IEC 60068-2-27

IEC 60068-2-32

- -40~75°C (-40~167°F) (EKI-7716G-4F4CI)
- Storage Temperature -40 ~ 85°C (-40 ~ 185°F)

10 ~ 95% (non-condensing)

- Operating Humidity 10 ~ 95% (non-condensing)
- Storage Humidity

Certification

- Safety
- EMI
- EMS
- Shock
- Freefall
- Vibration IEC 60068-2-6 EN 50121-4
- Railway Track Side
- Patent http://www.advantech.com/legal/patent

Ordering Information

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