EKI-7656C/CI

16+2G Combo Port Gigabit Managed Redundant Industrial Ethernet Switch



Features

- 2 Gigabit Copper/SFP combo ports, plus 16 Fast Ethernet ports
- SFP socket for Easy and Flexible Fiber Expansion
- Redundancy: Gigabit X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D)
- Management: Web, Telnet, Serial Console, SNMP
- Control: VLAN/GVRP, QOS, IGMP Snooping/Query, LACP, Rate Limit
- Security: IP/MAC and port binding, DHCP Server, IP access list, 802.1X, SSL, SNMPv3
- Diagnostic: Port Statistic, Port Mirroring, RMON, Trap, Email Alert, Syslog
- Dual 12 ~ 48 V_{DC} power inputs and 1 relay output
- Supports wide operating temperatures from -40 to 75°C (EKI-7656CI)



Introduction

The EKI-7656C supports 16 Fast Ethernet ports and 2 Gigabit combo ports. To create reliability in your network, the EKI-7656C comes equipped with a proprietary redundant network protocol -- X-Ring Pro that was developed by Advantech, which provides users with an easy way to establish a redundant Ethernet network with ultra high-speed recovery time less than 20 ms. Furthermore, EKI-7656C also supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety.

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)

• **Transmission Speed** Ethernet: 10/100 Mbps Auto-Negotiation

Gigabit Copper: 10/100/1000 Mbps, Auto-Negotiation,

SFP: Up to 1000 Mbps

Interface

Connectors 16 x RJ45 (Ethernet)

2 x RJ45/SFP (mini-GBIC) combo ports 6-pin removable screw terminal (Power&Relay)

• LED Indicators System: PWR, PWR1, PWR2, R.M., P-Fail Ethernet: Link/Activity, Duplex/Collision

Gigabit Copper: Link/Activity, Duplex/Collision

Gigabit Copper: Link/Activity, Speed (1000 Mbps)

SFP: Link/Activity

■ **Console** RS-232 (RJ45)

Network Management

Diagnostics
 Port Mirroring, Real-time traffic statistic, MAC Address

Table, SNTP, Syslog, E-Mail Alert, SNMP Trap, RMON

■ VLAN IEEE 802.1Q, GVRP, Port-based VLAN

 Configuration
 Web browser, Telnet, Serial consloe, TFTP, SNMPv1/v2c/v3, Port Speed/Duplex Configuration,

IPv6

• **Redundancy** Advantech X-Ring Pro (Recovery time < 20 ms at 250

pcs full loading ring structure), Dual Homing, Dual Ring, Couple Ring, 802.1w/D RSTP/STP Security

IP Access security, port security, DHCP Server, Port and IP Binding, 802.1X Port Access Control, SSL

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/

limit and storm control, IEEE 802.1p QoS CoS/TOS DSCP priority queuing, IEEE 802.3x flow control

Mechanism

Enclosure
 IP30, metal shell with solid mounting kits
 Dimensions (W x H x D) 79 x 152 x 105 mm (3.11" x 5.98" x 4.13")

Mounting DIN-rail, Wall

Power

Power Consumption Max. 10.7 W

■ **Power Input** 12 ~ 48 V_{DC}, redundant dual inpuds

• Fault Output 1 Relay Output

Protection

Power Reverse PresentOverload Current Present

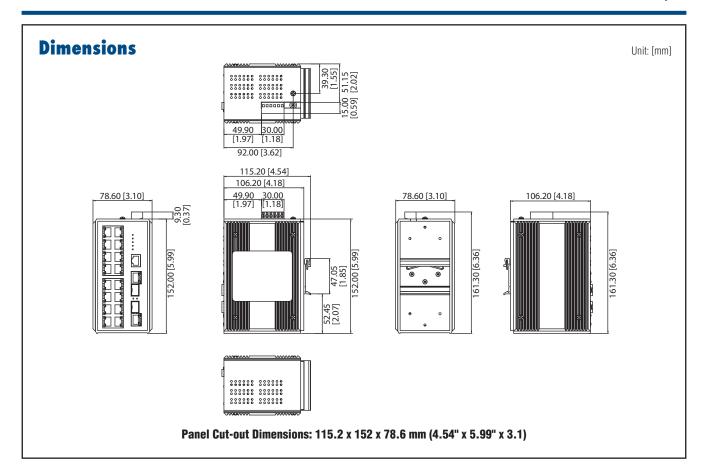
Environment

• Operating Temperature $-10 \sim 60^{\circ}\text{C}$ (14 ~ 140°F)

-40 ~ 75°C (-40 ~ 167°F) (EKI-7656CI)

Storage Temperature
 Operating Humidity
 Storage Humidity
 -40 ~ 85°C (-40 ~ 185°F)
 5 ~ 95% (non-condensing)
 0 ~ 95% (non-condensing)

MTBF 295,000 hours



Certification

Safety UL 60950-1, CAN/CSA-C22.2 No.60950 - EMI FCC Part 15 Subpart B Class A, EN 55022 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

Ordering Information

■ EKI-7656C

16FE + 2G Combo Port Managed Ethernet Switch EKI-7656CI 16FE + 2G Combo Port Managed Ethernet Switch w/ Wide Temp