EKI-7657C/CI

7+3G Combo Port Gigabit Managed **Redundant Industrial Ethernet Switch** with 2 x DI/O



Features

- 3 Gigabit Copper/SFP combo ports, plus 7 Fast Ethernet ports
- 2 Digital Inputs and 2 Digital Outputs for Events and Alarms in the Network
- 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 Statistics, Port Mirroring, RMON, Trap, Email Alert, Syslog
- Dual 12 ~ 48 V_{DC} power input and 1 relay output
- Operating temperature from -40 to 75°C (EKI-7657CI)











The EKI-7657C supports seven Fast Ethernet ports and three Gigabit combo ports with 2 x Digital Input and Digital Output ports. To create reliability in your network, the EKI-7657C 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, the EKI-7657C 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

10/100/1000Base-T (X), Optional 100Base-FX, LAN

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 Ethernet: 10/100 Mbps Auto-Negotiation

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

Gigabit Fiber: Up to 1000 Mbps

Interface

Console

Connectors 7 x RJ45 (Ethernet)

> 3 x RJ45/SFP (mini-GBIC) combo ports 1 x 6-pin removable terminal (Power & Relay)

1 x 6-pin removable terminal (DI/D0)

 LED Indicators System: PWR, PWR1, PWR2, R.M., P-Fail 10/100T (X): Link/Activity, Duplex/Collision

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

SFP: Link/Activity RS-232 (RJ45)

Network Management

 Configuration Web browser, Telnet, Serial console, TFTP,

SNMPv1/v2c/v3, Port Speed/Duplex Configuration,

VLAN IEEE 802.1Q, GVRP, Port-based VLAN

 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/ DSCP priority queuing, IEEE 802.3x flow control Port Mirroring, Real-time traffic statistic, MAC Address

Table, SNTP, Syslog, Email Alert, SNMP Trap, RMON

Mechanism

Diagnostics

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")

DIN-rail, Wall Mounting

Power

Power Consumption Max. 10.7 W

Power Input 12 ~ 48 V_{DC}, redundant dual inputs

 Fault Output 1 Relay Output

Protection

Power Reverse Present **Overload Current** Present

Environment

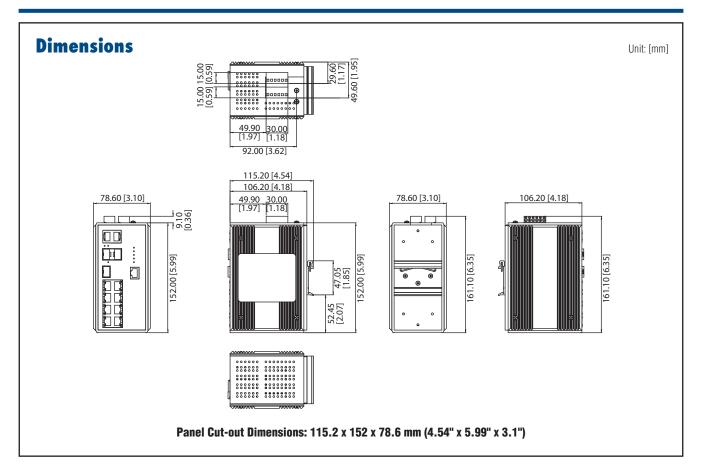
• Operating Temperature $-10 \sim 60^{\circ}\text{C}$ (14 ~ 140°F)

-40 ~ 75°C (-40 ~ 167°F) (EKI-7657CI)

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

Storage Humidity 0 ~ 95% (non-condensing) MTBF

284,409 hours



Certifications

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

IEC 60068-2-27 Shock IEC 60068-2-32 Freefall IEC 60068-2-6 Vibration

Ordering Information

 EKI-7657C 7FE + 3G Combo Port Managed Ethernet Switch w/ 2 x DI/D0

7FE + 3G Combo Port Managed Ethernet Switch EKI-7657CI w/ 2 x DI/DO and Wide Temp