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, 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/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** Present
- **Overload Current** Present

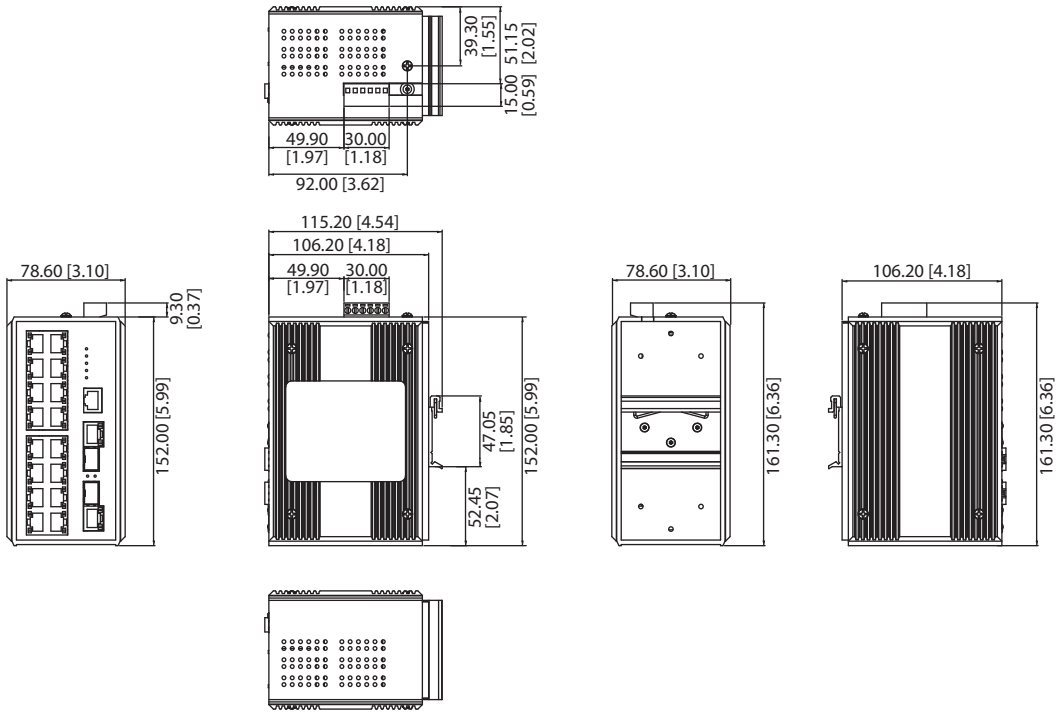
Environment

- **Operating Temperature** -10 ~ 60°C (14 ~ 140°F)
  -40 ~ 75°C (-40 ~ 167°F) (EKI-7656CI)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 5 ~ 95% (non-condensing)
- **Storage Humidity** 0 ~ 95% (non-condensing)
- **MTBF** 295,000 hours

All product specifications are subject to change without notice
Last updated : 5-May-2015

Dimensions

Unit: [mm]



Panel Cut-out Dimensions: 115.2 x 152 x 78.6 mm (4.54" x 5.99" x 3.1)

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