## EKI-7559SI/MI

# 8+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature



#### **Features**

- 2 x SC type fiber ports, plus 8 Fast Ethernet ports
- Redundancy: X-Ring (ultra high-speed recovery time<10ms), 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, SNMPv3
- Diagnostic: Port Statistic, Port Mirroring, RMON, Trap, Email Alert, Syslog
- Dual 12 ~ 48 V<sub>DC</sub> power input and 1 relay output
- Supports wide operating temperature -40 ~ 75° C



#### Introduction

EKI-7559SI/MI supports 8 Fast Ethernet ports and 2 SC type fiber optic ports. To create reliability in your network, the EKI-7559SI/MI comes equipped with a proprietary redundant network protocol — X-Ring 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 10 ms. Furthermore, EKI-7559SI/MI also supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety.

## **Specifications**

#### **Communications**

• **Standard** IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3x,

IEEE802.3ad, IEEE802.1d, IEEE802.1w, IEEE802.1p,

IEEE802.1Q, IEEE802.1x

■ LAN 10/100Base-T(X), 100Base-FX

Transmission Distance Ethernet: Up to 100m

Multi-mode Fiber: Up to 2km (EKI-7559MI)

Single-mode Fiber: Up to 30km (EKI-7559SI)

Up to 100Mbps

#### Interface

Connectors 8 x RJ-45 ports

2 x SC-type fiber-optic connectors

LED Indicators System: PWR, PWR1, PWR2, R.M., P-Fail

10/100T(X): Link/Activity, Duplex/Collision

**Console** RS-232 (RJ-45)

#### **Network Management**

Transmission Speed

Configuration
 Web browser, Telnet, Serial console, TFTP, SNMPv1/

v2c/v3, Port Speed/Duplex Configuration

VLAN

VLAN

VEEE 802.1Q, GVRP, Port-based VLAN

 Redundancy
 Advantech X-Ring (Recovery time < 10ms at 30pcs full loading ring structure), Dual Homing, Couple Ring,

802.1w/D RSTP/STP

Security IP Access security, port security, DHCP Server, Port

and IP Binding, 802.1X Port Access Control IGMP Snooping/Query for multicast group

 Traffic Control
 IGMP Snooping/Query for multicast group management Port Trunking, Static/802.3ad LACPRate

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, Email Alert, SNMP Trap, RMON

#### Mechanism

Enclosure IP30, metal shell with solid mounting kits

Dimensions (W x H x D) 79 x 152 x 105 mm
 Mounting DIN-rail, wall

#### **Power**

Power Consumption
 Power Input
 Max. 8.4W (EKI-7559MI/SI)
 12~ 48 V<sub>DC</sub>, redundant dual inputs

• Fault Output 1 Relay Output

#### **Protection**

ESD (Ethernet) 4,000 V<sub>DC</sub> Surge (EFT for Power) 3,000 V<sub>DC</sub> Power Reverse Present

Overload
 3.5 A @ 12 V<sub>DC</sub> (Fuse) (EKI-7559MI/SI)

#### **Environment**

Operating Temperature -40 ~ 75° C
Storage Temperature -40 ~ 85° C

Operating Humidity
 Storage Humidity
 5 ~ 95% (non-condensing)
 0 ~ 95% (non-condensing)

• MTBF 284,409 hours

#### Certifications

**Safety** UL 60950-1, CAN/CSA-C22.2 No.60950

■ **EMC** EU: EN55011, EN61000-6-4

EN55022 Class A, EN61000-3-2/3 EN55024, IEC61000-4-2/3/4/5/6/8 EN61000-6-2

Shock IEC60068-2-27
 Freefall IEC60068-2-32
 Vibration IEC60068-2-6

### **Ordering Information**

EKI-7559SI 8+2 SM Fiber Managed Ethernet Switch w/Wide Temp
 EKI-7559MI 8+2 MM Fiber Managed Ethernet Switch w/Wide Temp