

# 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)
- **Transmission Speed** 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

- **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 (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
- **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, SNMP, 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** Max. 8.4W (EKI-7559MI/SI)
- **Power Input** 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** 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
- **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