

# EKI-7559SI/MI

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

**4+2 SC Type Fiber Optic Managed Industrial Ethernet Switch with Wide Temperature**



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## Features

- 2 x SC type fiber ports, plus 4 Fast Ethernet ports. (EKI-7554SI/MI)
- 2 x SC type fiber ports, plus 8 Fast Ethernet ports. (EKI-7559SI/MI)
- Redundancy: X-Ring Pro (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, 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<sub>DC</sub> power input and 1 relay output
- Supports wide operating temperature -40 ~ 75°C

## Introduction

Both the EKI-7554SI/MI and EKI-7559SI/MI support two SC type Fiber ports, EKI-7554SI/MI four Fast Ethernet ports and EKI-7559SI/MI can support up to eight Fast Ethernet ports. To create reliability in your network, the EKI-7554SI/MI come 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-7554SI/MI 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, 802.3ad, 802.1D, 802.1w, 802.1p, 802.1Q, 802.1X
- **LAN** 10/100Base-T (X), 100Base-FX
- **Transmission Distance** Ethernet : Up to 100 m  
Multi-mode Fiber: Up to 2 km (EKI-7554MI)  
Single-mode Fiber: Up to 30 km (EKI-7554SI)
- **Transmission Speed** Up to 100 Mbps

### Interface

- **Connectors** 4 x RJ45 ports (EKI-7554SI/MI)  
8 x RJ45 ports (EKI-7559SI/MI)  
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 (RJ45)

### Network Management

- **Configuration** Web browser, Telnet, Serial console, TFTP, SNMPv1/v2c/v3, Port Speed/Duplex Configuration, IPv6
- **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
- **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 (3.11" x 5.98" x 4.13")
- **Mounting** DIN-rail, Wall

### Power

- **Power Consumption** Max. 7.7 W (EKI-7554SI/MI)  
Max. 8.4 W (EKI-7559SI/MI)
- **Power Input** 12 ~ 48 V<sub>DC</sub>, redundant dual inputs
- **Fault Output** 1 Relay Output

### Protection

- **Power Reverse** Present
- **Overload Current** Present

### Environment

- **Operating Temperature** -40 ~ 75°C (-40 ~ 167°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Operating Humidity** 5 ~ 95% (non-condensing)
- **Storage Humidity** 0 ~ 95% (non-condensing)
- **MTBF** 262,230 hours (EKI-7554SI/MI)  
264,964 hours (EKI-7559SI/MI)

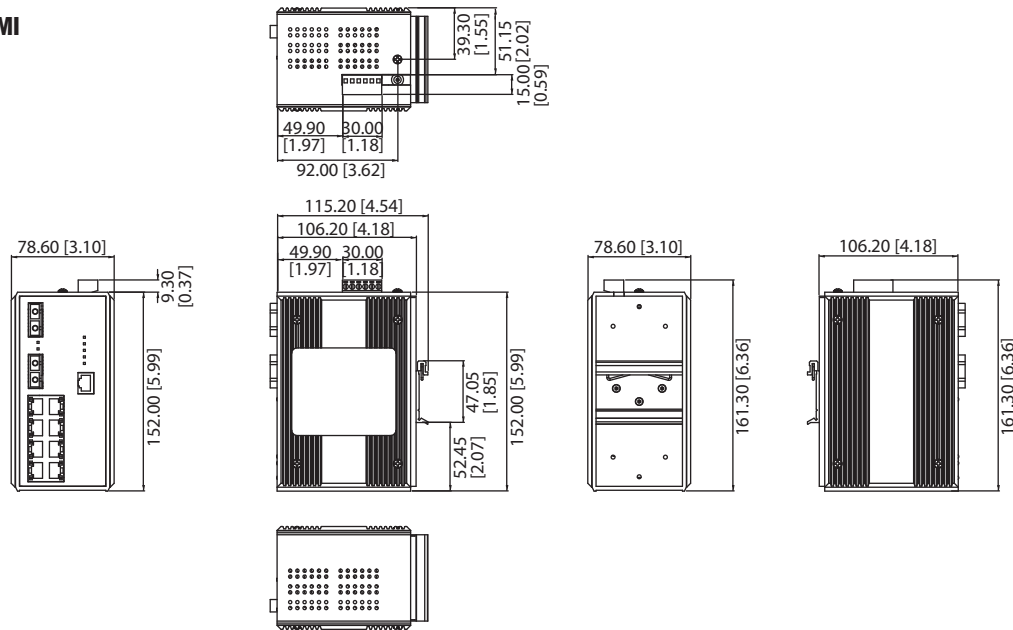
### Certification

- **Safety** UL 60950-1, CAN/CSA-C22.2 No.60950 Class I, Division 2 (EKI-7559MI/SI)
- **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

## Dimensions

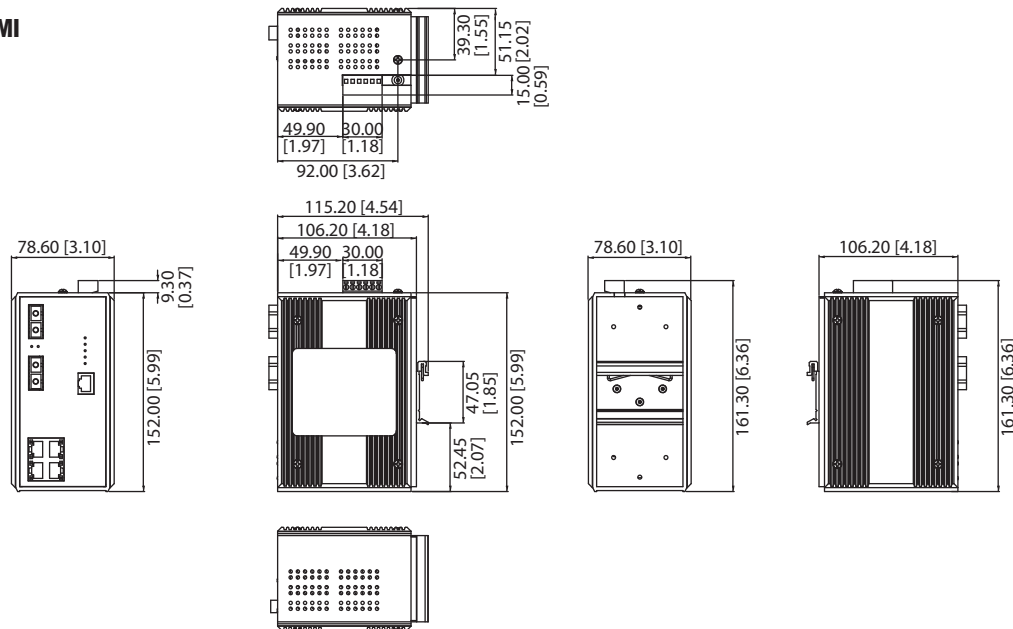
Unit: [mm]

### EKI-7559SI/MI



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

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## Ordering Information

- |                     |  |                     |  |
|---------------------|--|---------------------|--|
| ▪ <b>EKI-7554SI</b> | 4FE + 2-port Single-mode Fiber Managed Ethernet Switch w/Wide Temp | ▪ <b>EKI-7559SI</b> | 8FE + 2-port Single-mode Fiber Managed Ethernet Switch w/Wide Temp |
| ▪ <b>EKI-7554MI</b> | 4FE + 2-port Multi-mode Fiber Managed Ethernet Switch w/Wide Temp  | ▪ <b>EKI-7559MI</b> | 8FE + 2-port Multi-mode Fiber Managed Ethernet Switch w/Wide Temp  |