

EKI-7554MI EKI-7559MI / SI

**4+2 Multi-mode Fiber Optic
Managed Redundant Industrial Switch
with Wide Temperature**

**8+2 Multi/Single-mode Fiber Optic
Managed Redundant Industrial Switch
with Wide Temperature**



Features

- 2 x SC-type fiber ports, plus 4 or 8 Fast Ethernet ports
- Redundancy: X-Ring (ultra high-speed recovery time<10ms), RSTP/STP (802.1w/1D)
- Management: Web, Telnet, Serial Console, Windows Utility, 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, E-Mail Alert, Syslog
- Dual 12 ~ 48 VDC power input and 1 Relay Output
- Robust mechanism and special heat spreader design

Introduction

For many industrial automation applications, redundancy helps increase the reliability of your system. To create reliability in your network, the EKI-7559MI/SI & EKI-7554MI come 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-7559MI/SI & EKI-7554MI also supports many advanced network standards to optimize network performance, ease maintenance issues, and secure network safety.

Specifications

Communications

- Standard** IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x, IEEE802.3ad, IEEE802.1d, IEEE802.1w, IEEE802.1p, IEEE802.1Q, IEEE802.1x
- LAN** 10/100Base-TX, 100Base-FX
- Transmission Distance** Ethernet : Up to 100m
Multi-mode Fiber: Up to 2km (EKI-7554MI/7559MI)
Single-mode Fiber: Up to 30km (EKI-7559SI)
- Transmission Speed** Up to 100Mbps

Interface

- Connectors** 4 x RJ-45 ports (EKI-7554MI)
8 x RJ-45 ports (EKI-7559MI/SI)
2 x SC-type fiber-optic connectors
- LED Indicators** System: PWR, PWR1, PWR2, R.M., P-Fail
10/100TX: Link/Activity, Duplex/Collision
- Console** RS-232 (RJ-45)

Network Management

- Configuration** Web browser, Telnet, Serial console, Windows Utility, 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 (WxHxD)** 72 x 152 x 105 mm
- Mounting** DIN-rail, wall

Power

- Power Consumption** Max. 7.7W (EKI-7554MI)
Max. 8.4W (EKI-7559MI/SI)
- Power Input** 2 x Unregulated 12~ 48 V_{DC}
- Fault Output** 1 Relay Output

Protection

- ESD (Ethernet)** 4,000 V_{DC}
- Surge (EFT for Power)** 3,000 V_{DC}
- Power Reverse** Present
- Overload** 1.6A @ 12VDC (Re-settable Fuse) (EKI-7554MI)
3.5A @ 12VDC (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-7554MI** 4+2 Multi-mode SC Type Fiber Port Industrial Managed Redundant Ethernet Switch, Wide Temp.
- EKI-7559MI** 8+2 Multi-mode SC Type Fiber Port Industrial Managed Redundant Ethernet Switch, Wide Temp.
- EKI-7559SI** 8+2 Single-mode SC Type Fiber Port Industrial Managed Redundant Ethernet Switch, Wide Temp.