# EKI-6558TI
# EKI-6559TMI

**EN50155 IP67 8-port M12 Managed Ethernet Switch with Wide Temperature**

**EN50155 IP67 8-port M12 + 2-port Fiber Optic Managed Ethernet Switch with Wide Temperature**

EKI-6558TI

EKI-6559TMI

## Features

- EN50155 certified
- Supports X-Ring Pro function (ultra high-speed recovery time < 20 ms)
- Wide redundant power design
- Provides M12 connector with IP67 protection
- Provides Waterproof fiber optic connector
- TFTP firmware updates and system configure restore and backup
- Dual 12 ~ 48 $V_{DC}$ power input and 1 relay output
- Supports wide operating temperature -40 ~ 75°C
- Provides 100 Mbps LC type connector

## Introduction

The EKI-6558TI and EKI-6559TMI are EN50155 certified IP67 wide temperature industrial switches which are especially designed for railway industry and harsh environments. M12 connectors secure highly reliable connectivity for industrial communication applications. EN50155 certification ensures the use of railway application. EKI-6559TMI also provides two additional fiber optic ports to extend communication range. Both EKI-6558TI and EKI-6559TMI provide Advantech's X-Ring Pro protocol, which enables users to establish a redundant Ethernet network with ultra high-speed recovery (less than 20 ms). They also support advanced network standards to optimize network performance, reduce maintenance cost, 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 Speed** — Up to 100 Mbps

### Interface

- **Ethernet** — M12, 4-pole D-coded, Female x 8
- **Fiber Optic** — LC type waterproof x 2, Multi-mode (EKI-6559TMI)
- **Console** — M12, 8-pole A-coded, Female x 1

### 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** — IP67, aluminum shell with solid mounting kits
- **Dimensions (W x H x D)** — 193 x 176 x 62.5 mm (7.59" x 6.93" x 2.46")
- **Mounting** — Wall

### Power

- **Power Consumption** — Max. 8.1 W
- **Power Input** — 12 ~ 48 $V_{DC}$, redundant dual inputs
- **Power Connector** — M12, 5-pole A-coded, male x 1
- **P-Fail Output** — 1A @ 24 $V_{DC}$
- **P-Fail Connector** — M12, 8-pole A-coded, Female x 1

### Protection

- **Power Reverse** — 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** — 388,201 hours (EKI-6558TI) 320,420 hours (EKI-6559TMI)
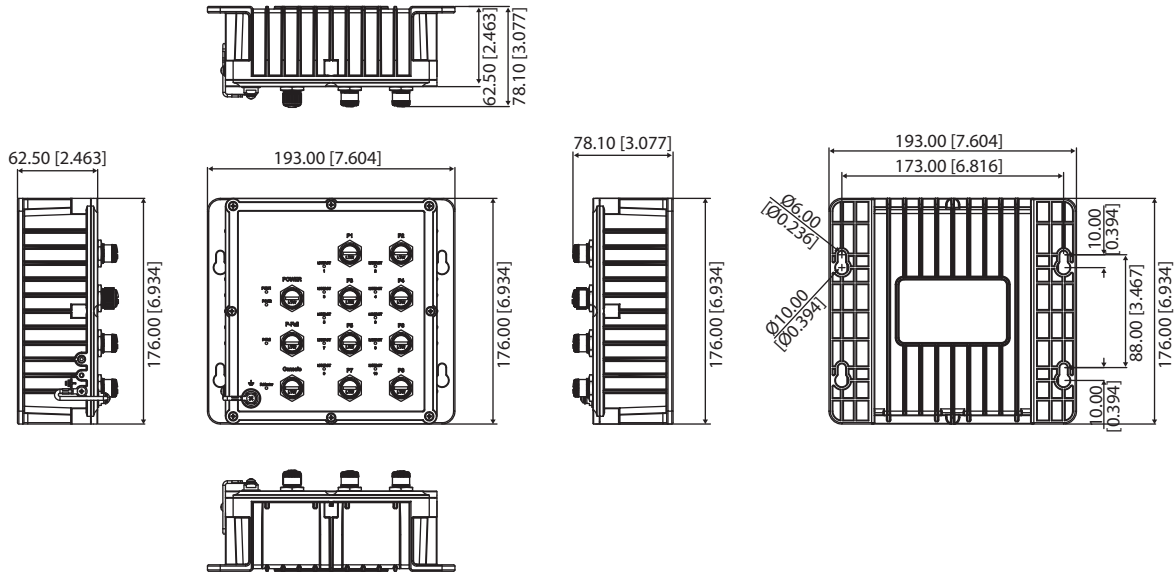
### Certification

- **Safety** — UL 508
- **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 61373
- **Freefall** — IEC 60068-2-32
- **Vibration** — IEC 61373
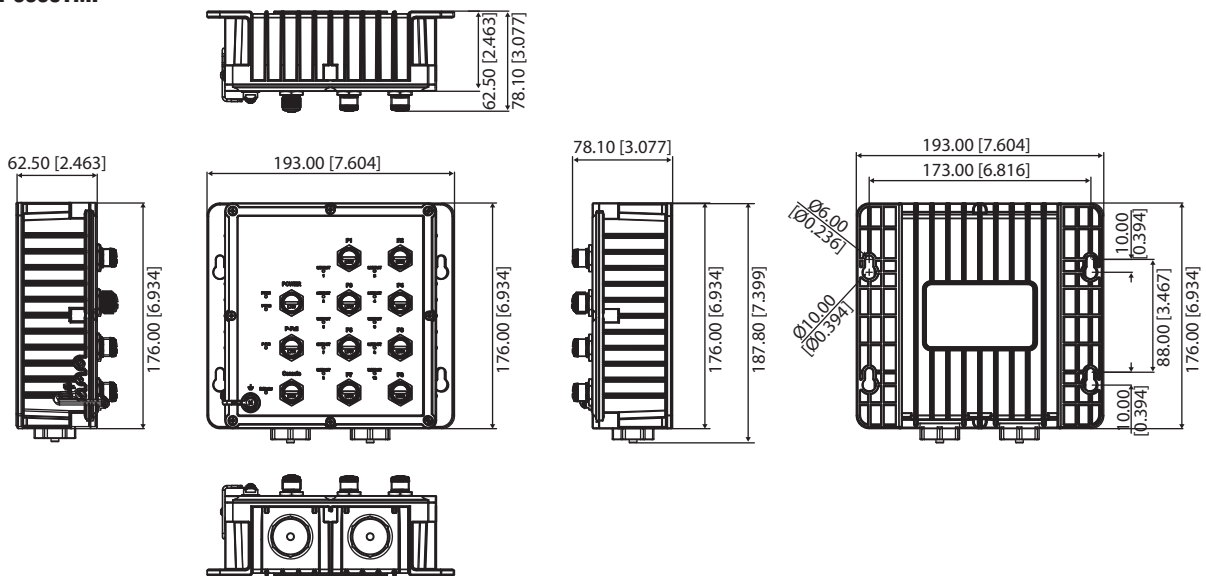- **Railway** — EN50155, EN 50121-3-2, EN 50121-4

## Dimensions

Unit: [mm]

**EKI-6558TI**

62.50 [2.463]
78.10 [3.077]

62.50 [2.463]
193.00 [7.604]
176.00 [6.934]
176.00 [6.934]

78.10 [3.077]
176.00 [6.934]

193.00 [7.604]
173.00 [6.816]
Ø6.00 [Ø0.236]
Ø10.00 [Ø0.394]
10.00 [0.394]
88.00 [3.467]
176.00 [6.934]
10.00 [0.394]

**Panel Cut-out Dimensions: 193 x 176 x 62.5 (7.604" x 6.934" x 2.463")**

**EKI-6559TMI**

62.50 [2.463]
78.10 [3.077]

62.50 [2.463]
193.00 [7.604]
176.00 [6.934]
176.00 [6.934]

78.10 [3.077]
176.00 [6.934]
187.80 [7.399]

193.00 [7.604]
173.00 [6.816]
Ø6.00 [Ø0.236]
Ø10.00 [Ø0.394]
10.00 [0.394]
88.00 [3.467]
176.00 [6.934]
10.00 [0.394]

**Panel Cut-out Dimensions: 193 x 176 x 62.5 (7.604" x 6.934" x 2.463")**

## Ordering Information

- **EKI-6558TI**     EN50155 8-port M12 Managed Ethernet Switch
- **EKI-6559TMI**     EN50155 8-port M12+ 2-port FX Managed Ethernet Switch