

# EKI-9508E-MH

# EKI-9508E-ML

**EN 50155 8-Port M12 Managed Ethernet Switch 72/96/110 V<sub>DC</sub>**  
**EN 50155 8-Port M12 Managed Ethernet Switch 24/48 V<sub>DC</sub>**



CE FCC

## Features

- Complies with EN50155
- 8 port M12 D-coded 10/100Mbps ports
- Power input  
EKI-9508E-MH: 72/96/110 V<sub>DC</sub>  
EKI-9508E-ML: 24/48 V<sub>DC</sub>
- Operating Voltage  
EKI-9508E-MH: 50.4~137.5 V<sub>DC</sub>  
EKI-9508E-ML: 16.8~60 V<sub>DC</sub>
- X-Ring Pro supports rapid and predictable convergence
- M12 connector with IP40 protection
- Operating temperature of -40 ~ 70°C

## Introduction

EKI-9500 series switch is designed for railway application, with rugged and high EMC performance. EKI-9500 series is the suitable networking solution for rolling stock and wayside applications. EKI-9500 series provide M12 connectors for Ethernet/ console/ relay/ power-input connections to ensure tight & robust connectivity, to guarantee reliable operation against environmental disturbances, such as vibration and shock on train. EKI-9508E-MH & EKI-9508E-ML is a Managed Ethernet switch, it provides 8 x Fast Ethernet M12 D-code interface for all kinds of Ethernet connection. EKI-9508E-MH/ ML features a "slim" design, can be easy deployed with its slender size and let network deployment more simple in crowded carriage/ cabinet.

## Specifications

### Interface

- I/O Port** 8 x 10/100BASE-T M12 D-coded
- Console Port** M12 A-coded
- Power Connector** M12 A-coded

### Physical

- Enclosure** Metal
- Protection Class** IP40
- Installation** Wall mount
- Dimensions (W x D x H)** 122.5 x 179.4 x 71.8 mm
- Weight** 1.3kg

### LED Display

- System LEDs** PWR1, PWR2, R.M., SYS

### Environment

- Operating Temperature** -40 ~ 70°C
- Storage Temperature** -40 ~ 85°C
- Ambient Relative Humidity** 10 ~ 95% (non-condensing)

### Power

- Power Consumption** ~5 W (system)
- Power Input** EKI-9508E-MH: 72/96/110 V<sub>DC</sub>  
EKI-9508E-ML: 24/48 V<sub>DC</sub>
- Operating Voltage** EKI-9508E-MH: 50.4~137.5 V<sub>DC</sub>  
EKI-9508E-ML: 16.8~60 V<sub>DC</sub>  
Dual inputs Supports Overload Current Protection  
Supports Reverse Polarity Protection

### Certification

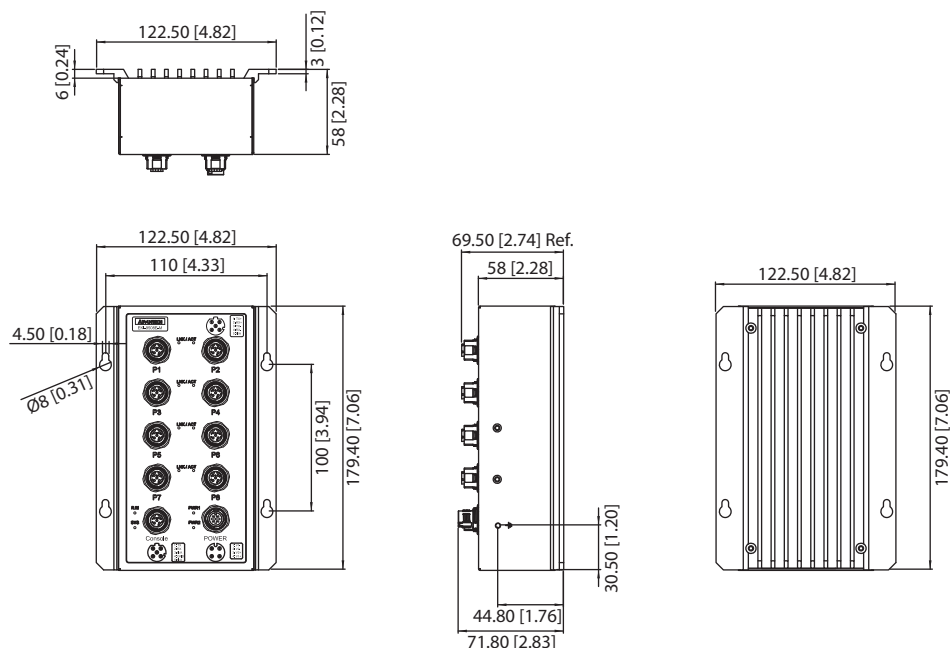
- EMI** FCC Part 15 Subpart B Class A  
CE EN55032 (CISPR)  
EN55024 Class A
- EMS** EN61000-4-2 (ESD), EN61000-4-3 (RS),  
EN61000-4-4 (EFT), EN61000-4-5 (surge),  
EN61000-4-6 (CS)
- Shock** IEC 61373
- Freefall** IEC 60068-2-32
- Vibration** IEC 61373
- Rail Traffic** EN 50155; EN50121-3-2

### L2 Features

- L2 MAC Address** 8K
- Jumbo Frame** 9 KB
- VLAN Group** 4K (VLAN ID 1~4094)
- VLAN** MAC-based VLAN, Protocol-based VLAN,  
IP subnet-based VLAN, port-based VLAN,  
Q-in-Q (VLAN stacking), GVRP
- Port Mirroring** Per port, multi-source port
- IP Multicast** IGMP snooping v1/v2/v3, MLD snooping,  
IGMP immediate leave
- Storm Control** Broadcast, multicast, unknown unicast
- Spanning Tree** IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE  
802.1w-RSTP, X-Ring Pro

## Dimensions

Unit: mm [in.]



### QoS

- **Priority Queue Scheduling** SWW, SP
- **Class of Service** IEEE 802.1p-based CoS, IP TOS, DSCP-based CoS
- **Rate Limiting** Egress rate limit
- **Link Aggregation** IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

### Security

- **Port Security** Static, dynamic
- **Authentication** 802.1x (port-based, MAC-based), RADIUS, TACACS+
- **ACL** 1K rules
- **Advanced Security** IP source guard, ARP inspection, DHCP snooping

### Management

- **DHCP** Client, server, relay, option 66/67/82
- **Access** SNMP v1/v2c/v3, WEB, Telnet, RMON, standard MIB, private MIB
- **Security Access** SSH 2.0, SSL
- **Software Upgrade** TFTP, HTTP, dual image
- **NTP** NTP client

### IPv6 Features

- **IPv4/IPv6** IPv4/IPv6 dual protocol stack
- **IPv6** HTTP, SSH, Telnet, TFTP, SNMP, SMTP

## Ordering Information

- **EKI-9508E-MH-AE** Layer 2 managed switch, 8 x M12 fast Ethernet, 72/96/110 V<sub>DC</sub> dual power input
- **EKI-9508E-ML-AE** Layer 2 managed switch, 8 x M12 fast Ethernet, 24/48 V<sub>DC</sub> dual power input

## Accessories

| PN                 |  | Description  |
|--------------------|--|--|
| OPT1-M12-CRP-4MD   |  | Phoenix Contact M12 D-code 4 pin Male crimp type connector   |
| OPT1-M12-CRP-5MA   |  | Phoenix Contact M12 A-code 5 pin Male crimp type connector   |
| OPT1-M12-CRP-4FA   |  | Phoenix Contact M12 A-code 4 pin Female crimp type connector |
| OPT1-M12C-4MD-150R |  | M12 D-code 4 pin Male to RJ45, cable length: 1.5m            |
| OPT1-M12C-5MA-DB9  |  | M12 A-code 5 pin Male to DB9 console, cable length: 1.5m     |
| OPT1-M12C-4FA-100  |  | M12 A-code 4 pin Female to 1m cable                          |
| 1990023703S000     |  | M12 waterproof CAP (1pc.)                                    |

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