# **EKI-9**510E-2GMH **EKI-9**510E-2GML

EN50155 10-port Managed M12 Ethernet Switch 72/96/110 V<sub>DC</sub> EN50155 10-port Managed M12 Ethernet Switch 24/48 V<sub>DC</sub>



### **Features**

- Complies with EN50155
- 8 x M12 D-Coded 10/100Mbps ports + 2 x M12 X-Coded 10/100/1000Mbps ports with Bypass function
- Power Input
   EKI-9510E-2GMH: 72/96/110 Voc
   EKI-9510E-2GML: 24/48 Voc
- Operating Voltage
   EKI-9510E-2GMH: 50.4~137.5 Vpc
   EKI-9510E-2GML: 16.8~60 Vpc
- X-Ring Pro supports rapid and predictable convergence
- M12 connector with IP40 protection

# C € FCC

## Introduction

The EKI-9500 series switch is designed for railway application with rugged and high EMC performance, being suitable for networking solution for rolling stock and wayside applications. The EKI-9500 series provides M12 connectors for Ethernet/ console/ relay/ power-input connections to ensure tight & robust connectivity, and thus to guarantee reliable operation against environmental disturbances such as vibration and shock on train.

EKI-9510E-2GH & EKI-9510E-2GL are Ethernet switches that provide 8 x Fast Ethernet M12 D-coded ports. Each of them also provides 2 x Gigabit Ethernet M12 X-coded ports with Bypass function to increase the reliability of the network. The EKI-9510E-2GH/ L features a "flat" design which can be easy deployed with its slender size and make network deployment easier in crowded carriage/ cabinet.

# **Specifications**

Interface	
<ul><li>I/O Port</li></ul>	8 x M12 D-Coded 10/100Mbps ports +
	2 x M12 X-Coded 10/100/1000Mbps ports with
	Bypass function
<ul><li>Console port</li></ul>	M12 A-Coded
<ul> <li>Power Connector</li> </ul>	M12 A-Coded

#### **Physical**

Enclosure Aluminum Shell
 Protection Class IP 40
 Installation Wall Mount
 Dimensions (W x D x H) 216 x 132 x 59.3 mm

• Weight 1.5kg

#### **LED Display**

System LEDs
 PWR1, PWR2, SYS, R.M., Alarm

#### **Environment**

Operating Temperature -40 ~ 70°C (-40 ~ 158°F)
 Storage Temperature -40 ~ 85°C (-40 ~ 185°F)
 Ambient Relative Humidity 10~ 95% (non-condensing)

#### Power

• Power Consumption 10 Watts

Power Input
 EKI-9510E-2GMH: 72/96/110 Vpc
 EKI-9510E-2GML: 24/48 Vpc
 Operating Voltage
 EKI-9510E-2GMH: 50.4~137.5 Vpc

EKI-9510E-2GML: 16.8-60 Voc Dual inputs Supports Overload Current Protection Supports Reverse Polarity Protection

#### Certification

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

Certificate EN50155: EN50121-3-2

#### **L2 Features**

L2 MAC Address 8KJumbo Frame 9KB

VLAN Group 256 (VLAN ID 1~4093)
 VLAN 802.1Q VLAN, GVRP
 Port Mirroring Per port, Multi-source port

• IP Multicast IGMP Snooping v1/v2/v3, MLD Snooping, IGMP

Immediate leave

Storm Control
 Redundancy Protocol
 Broadcast, Multicast, Unknown unicast
 IEEE802.1D-STP, IEEE802.1s-MSTP, IEEE802.1w-RSTP, X-Ring Pro

#### QoS

Priority Queue Scheduling WRR (Weighted Round Robin),

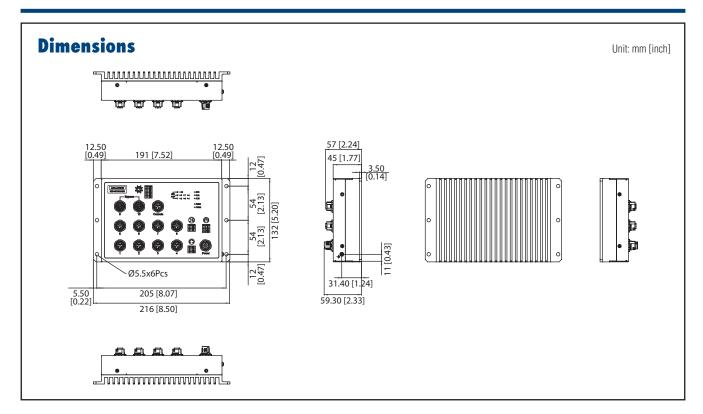
SP (Strict Priority)

Class of Service IEEE802.1p based CoS, IP TOS, DSCP based CoS

Rate Limiting Egress Rate limit

• Link Aggregation IEEE802.3ad Dynamic Port Trunking, Static Port

Trunking



#### Security

 Port Security Static, Dynamic

Authentication 802.1x (Port-Based, MAC-Based), RADIUS, TACACS+

 Advanced Security IP Source Guard

## Management

DHCP Client, Server, Option 66/67

SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB, Access

Private MIB

 Security Access SSH 2.0, SSL Software Upgrade TFTP, HTTP, Dual Image NTP NTP server/client

# **Ordering Information**

■ EKI-9510E-2GMH-AE

8 x M12 D-Coded + 2 x M12 X-Coded Managed Ethernet Switch, 72/96/110Vpc dual power input ■ EKI-9510E-2GML-AE 8 x M12 D-Coded + 2 x M12 X-Coded Managed Ethernet Switch, 24/48Vpc dual power input