# EKI-9510G-2GMH EKI-9510G-2GML

EN 50155 10-port Managed M12 Full Giga Ethernet Switch 72/96/110  $V_{\text{DC}}$  EN 50155 10-port Managed M12 Full Giga Ethernet Switch 24/48  $V_{\text{DC}}$ 



#### **Features**

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

## 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-9510G-2GMH & EKI-9510G-2GML is a Managed Ethernet switch, it provides 8 x Gigabit Ethernet M12 X-code interface. It also provides 2 x Gigabit Ethernet M12 X-code interface with Bypass function, to increase the reliability of the network. EKI-9510G-2GMH/ ML features a "flat" design, can be easy deployed with its slender size and let network deployment more simple in crowded carriage/ cabinet.

Cortification

**C**€FCC

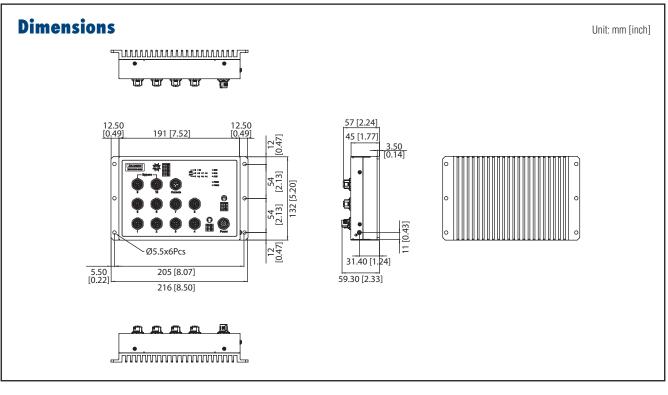
# **Specifications**

#### Interface

Interface		Certification	
<ul> <li>I/O Port</li> </ul>	8 x 10/100/1000Mbps M12 X-Coded + 2 x M12 X-Coded 10/100/1000Mbps ports with Bypass function	• EMI	FCC Part 15 Subpart B Class A CE EN55032 (CISPR) EN55024 Class A
<ul> <li>Console port</li> </ul>	M12 A-Coded	EMS	EN61000-4-2 (ESD); EN61000-4-3 (RS);
Power Connector	M12 A-Coded		EN61000-4-4 (EFT); EN61000-4-5 (Surge);
			EN61000-4-6 (CS)
Physical		<ul> <li>Shock</li> </ul>	IEC 61373
<ul> <li>Enclosure</li> </ul>	Aluminum Shell	<ul> <li>Freefall</li> </ul>	IEC 60068-2-32
Protection Class	IP 40	<ul> <li>Vibration</li> </ul>	IEC 61373
Installation	Wall Mount	<ul> <li>Certificate</li> </ul>	EN 50155; EN50121-3-2
<ul> <li>Dimensions (W x D x H</li> </ul>	) 216 x 132 x 59.3 mm		
<ul> <li>Weight</li> </ul>	1.5kg	L2 Features	
		L2 MAC Address	8K
LED Display		<ul> <li>Jumbo Frame</li> </ul>	9KB
<ul> <li>System LEDs</li> </ul>	PWR1, PWR2, SYS, R.M., Alarm	<ul> <li>VLAN Group</li> </ul>	256 (VLAN ID 1~4093)
Environment		VLAN	802.1Q VLAN, GVRP
		<ul> <li>Port Mirroring</li> </ul>	Per port, Multi-source port
<ul> <li>Operating Temperature</li> </ul>	· · · · · · · · · · · · · · · · · · ·	IP Multicast	IGMP Snooping v1/v2/v3, MLD Snooping, IGMP
<ul> <li>Storage Temperature</li> </ul>	-40 ~ 85°C (-40 ~ 185°F)		Immediate leave
<ul> <li>Ambient Relative Humi</li> </ul>	dity 10~95% (non-condensing)	<ul> <li>Storm Control</li> </ul>	Broadcast, Multicast, Unknown unicast
Power		Redundancy Protocol	IEEE 802.1D-STP, IEEE 802.1s-MSTP,
			IEEE 802.1w-RSTP, X-Ring Pro
<ul> <li>Power Consumption</li> </ul>	10 Watts	QoS	
<ul> <li>Power Input</li> </ul>	EKI-9510G-2GMH: 72/96/110 VDC		
- Operating Voltage	EKI-9510G-2GML: 24/48 V <sub>DC</sub>	<ul> <li>Priority Queue</li> </ul>	Scheduling WRR (Weighted Round Robin),
<ul> <li>Operating Voltage</li> </ul>	EKI-9510G-2GMH: 50.4~137.5 Vpc EKI-9510G-2GML: 16.8~60 Vpc	- Class of Somias	SP (Strict Priority)
	Dual inputs Supports Overload Current Protection	<ul> <li>Class of Service</li> <li>Data Limiting</li> </ul>	IEEE 802.1p based CoS, IP TOS, DSCP based CoS
	Supports Reverse Polarity Protection	<ul> <li>Rate Limiting</li> </ul>	Egress Rate limit
		<ul> <li>Link Aggregation</li> </ul>	IEEE 802.3ad Dynamic Port Trunking, Static Port

egation IEEE 802.3ad Dynamic Port Trunking, Static Por Trunking

#### EKI-9510G-2GMH EKI-9510G-2GML



#### Security

Port Security

Static, Dynamic

IP Source Guard

- Authentication
- Advanced Security

#### Management

- DHCP
- Access

Client, Server, Option 66/67 SNMP v1/v2c/v3, WEB, Telnet, RMON, Standard MIB, Private MIB SSH 2.0, SSL

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

## **Ordering Information**

- EKI-9510G-2GMH-AE
   EKI-9510G-2GML-AE
- $8 \times M12 X-Coded + 2 \times M12 X-Coded Managed Ethernet Switch, 72/96/110V_{Dc} dual power input 8 <math display="inline">\times M12 X-Coded + 2 \times M12 X-Coded Managed Ethernet Switch, 24/48V_{Dc} dual power input$

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

## Accessories

PN		Description	
OPT1-M12-CRP-8MX		Phoenix Contact M12 X-code 8 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-8MX-150R		M12 X-code 8 pin Male to RJ45, cable length:1.5m	
0РТ1-М12С-5МА-DB9		M12 A-code 5 pin Male to DB9 console, cable length:1.5m	
0PT1-M12C-4FA-100		M12 A-code 4 pin Female to 1m cable	
1990023703S000		M12 waterproof CAP (1pc.)	