

# EKI-9512

## EN 50155 12-port Full Gigabit Managed Ethernet Switch



### Features

- Complies with EN50155
- All Gigabit connections support dual ring protection and non-blocking traffic forwarding
- 8 x M12 Gigabit ports and 2 pairs M12 Gigabit ports with bypass relay function
- X-Ring Pro supports rapid and predictable convergence
- Provides M12 connector with IP67 protection
- Supports wide operating temperatures from -40 ~ 70°C

### Introduction

EKI-9512 M12 Managed Ethernet Switch is designed for railway applications, including rolling stock. EKI-9512 switch uses M12 connectors to ensure tight, robust connections, and to guarantee reliable operation against environmental disturbances, such as vibration and shock. EKI-9512 provides 12 Gigabit Ethernet M12 ports. In addition, EKI-9512 provides a wide power input range of 24/36/48/72/96/110 V<sub>DC</sub>; the dual, isolated power input increases the reliability of your communications system. The -40 to 70° C operating temperature and IP67-rated waterproof enclosure allow deployment in harsh environments. EKI-9512 is compliant with the essential sections of the European railway standard EN 50155, EN50121-3-2, covering operating temperature, power input voltage, surge, ESD, and vibration, making the switches suitable for a variety of industrial applications.

### Specifications

#### Interface

- **I/O Port** 12 x 10/100/1000BaseT M12 X-Code
- **Console Port** M12 A-Code
- **F/W Backup Port** USB (M12 A-Code)
- **Power Connector** M23 6 pin

#### Physical

- **Enclosure** Aluminum Shell
- **Protection Class** IP 67
- **Installation** Wall Mount, DIN Rail (Optional)
- **Dimensions (W x D x H)** 254 x 174 x 64.5 (mm)
- **Weight** 3.5 kg

#### LED Display

- **System LEDs** PWR1, PWR2, SYS, CFG, ALM
- **Port LED** Data

#### Environment

- **Operating Temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Ambient Relative Humidity** 5 ~ 95% (non-condensing)

#### Power

- **Power Consumption** ~ 26.4 Watts (System)
- **Power Input** 24/36/48/72/96/110 V<sub>DC</sub> dual inputs  
Supports Overload Current Protection  
Supports Reverse Polarity Protection

#### Certification

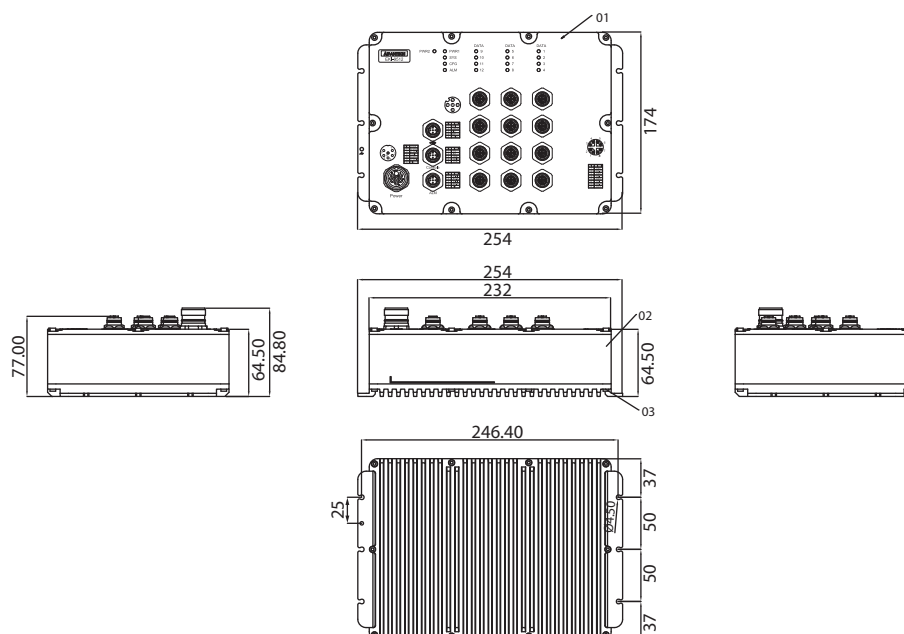
- **EMI** FCC Part 15 Subpart B Class A  
CE EN55022 (CISPR)  
EN55024 Class A
- **EMS** EN61000-4-2 (ESD); EN61000-4-3 (RS); EN61000-4-4 (EFT); EN61000-4-5 (Surge); EN61000-4-6 (CS)
- **Shock** IEC 61373
- **Freefall** IEC 60068-2-32
- **Vibration** IEC 61373
- **Rail Traffic** EN 50155; EN50121-3-2

#### L2 Features

- **L2 MAC Address** 16K
- **Jumbo Frame** 9KB
- **VLAN Group** 4093 (VLAN ID 1~4093)
- **VLAN** Mac based VLAN, Protocol based VLAN, IP subnet based VLAN, Port based VLAN, 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



### QoS

- **Priority Queue Scheduling** WRR (Weighted Round Robin), SP (Strict Priority)
- **Class of Service** IEEE 802.1p based CoS, IP TOS, DSCP based CoS
- **Rate Limiting** Egress Rate limit, Ingress Rate limit
- **Link Aggregation** IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

### Security

- **Port Security** Static, Dynamic
- **Authentication** 802.1x (Port-Based), RADIUS, TACACS+
- **ACL** 550 rules
- **Advanced Security** IP Source Guard

### Management

- **DHCP** Client, Server, Relay, Option 66/67
- **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

## Ordering Information

- **EKI-9512-C0IDW10E** 12 x M12 GbE Managed Ethernet Switch, including 24/36/48/72/96/110 V<sub>DC</sub> dual power inputs