

# EKI-9512-4GRX

## EN50155 Layer 3 Management Ethernet Switch



### Features

- M12 connector with IP67 rugged housing
- Complies with EN50155 & EN50121-3-2
- Wide nominal power input range: 24-110V<sub>DC</sub>
- Operating power input range: 16.8-137.5V<sub>DC</sub>
- Supports X-Ring Pro for rapid and predictable convergence
- Supports N-Key for quick configuration and backup
- Operating temperature: -40 ~ 75°C
- Provides Fast Ethernet & Full Giga Ethernet solution

### Introduction

The EKI-9512E(G)-4GRX Ethernet switch is designed for railway applications with rugged housing and high EMC performance. It is a suitable networking solution for rolling stock and wayside applications. It provides M12 connectors for Ethernet/ console/ relay/ power-input(M23) connections to ensure tight and robust connectivity, guarantees reliable operation against environmental disturbances, and complies with IEC61373 vibration and shock for rolling stock applications. , and supports Layer 3 routing capabilities to facilitate the deployment of applications across networks, separating the subnet and also optimizing the security of on-board network. The EKI-9512E(G)-4GRX features IP67 housing and ample pitch connectors that can easily connect/ disconnect cables without interference; reducing human errors within the harsh and narrow industrial environments.

### Specifications

#### Interface

- **Ethernet Port**
  - M12 4pin D-coded Female for Fast Ethernet (10/100BASE-T)
  - M12 8pin X-coded Female for Giga Ethernet (10/100/1000BASE-T)
- **Console Port**
  - M12 5pin A-coded Female
- **Relay Port**
  - M12 5pin A-coded Female with 2 relay outputs of 1A @ 24V<sub>DC</sub>
- **Power Connector**
  - M23 connector

#### Physical

- **Enclosure**
  - Aluminum Shell
- **Protection Class**
  - IP67
- **Installation**
  - Wall Mount
- **Dimension**
  - 254 x 174 x 64.5 mm (W x H x D)

#### LED Display

- **System LED**
  - PWR1, PWR2, SYS, Alarm, R.M.
- **Port LED**
  - Data, PoE (For PoE model only)

#### Environment

- **Operating Temperature**
  - 40~75°C (-40~167°F)
- **Storage Temperature**
  - 40~85°C (-40~185°F)
- **Humidity**
  - 5~95% (non-condensing)

#### Power

- **Power Consumption**
  - 17 Watts (System)
- **Nominal Input Voltage**
  - 24/28/36/48/72/96/110V<sub>DC</sub>
- **Operating Input range**
  - 16.8-137.5V<sub>DC</sub>

#### Certification

- **Safety**
  - EN62368-1
- **EMC**
  - CE, EN55011/ 55032/ 55024; FCC Part 15 Subpart B class A
- **EMS**
  - EN61000-4-2(ESD); EN61000-4-3(RS); EN61000-4-4(EFT); EN61000-4-5(Surge); EN61000-4-6(CS)
- **Shock**
  - EN 61373
- **Vibration**
  - EN 61373
- **Railway**
  - EN50155, EN50121-2-3, 50121-1
- **Fire Protection**
  - EN45545-2
- **Other**
  - EN61000-6-4, EN61000-6-2

#### L2 Feature

- **L2 MAC Address**
  - 8K
- **Jumbo Frame**
  - 9KB
- **VLAN Group**
  - 256 (VLAN ID 1~4094)
- **VLAN Group**
  - 802.1Q, GVRP, 802.1ad VLAN stacking
- **Port Mirroring**
  - Per port, Multi-source port (4 Mirroring sessions Max.)
- **IP Multicast**
  - IGMP snooping v1/v2/v3, MLD snooping(256 Multicast Entries Max.)

#### Layer 3 Feature

- **Routing Feature**
  - Static Route
- **Max. Host Entries**
  - 512
- **NAT**
  - S-NAT, D-NAT

