EKI-9510E-2GMPH
EKI-9510E-2GMPL

EN 50155 10-Port Managed PoE M12 Ethernet Switch 72/96/110 V$_{DC}$
EN 50155 10-Port Managed PoE M12 Ethernet Switch 24/48 V$_{DC}$

Features

- Complies with EN50155

- 8 x M12 D-Coded 10/100Mbps PoE ports + 2 x M12 X-Coded 10/100/1000Mbps ports with Bypass function

- Power Input
  EKI-9510E-2GMPH: 72/96/110 V$_{DC}$
  EKI-9510E-2GMPL: 24/48 V$_{DC}$

- Operating Voltage
  EKI-9510E-2GMPH: 50.4~137.5 V$_{DC}$
  EKI-9510E-2GMPL: 16.8~60 V$_{DC}$

- X-Ring Pro supports rapid and predictable convergence

- 8-port PoE support IEEE802.3 at/af

- M12 connector with IP40 protection

CE FCC

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-9510E-2GMPH & EKI-9510E-2GMPL is a Managed PoE Ethernet switch, it provides 8 x Fast Ethernet M12 D-code interface with IEEE802.3af/at PoE(Power Over Ethernet) function. PoE ports can total provide up to 100Watts power budget for P.D. devices (such as camera, IP-phone and wireless access point). It also provides 2 x Gigabit Ethernet M12 X-code interface with Bypass function, to increase the reliability of the network. EKI-9510E-2GMPH/ MPL features a "flat" 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 M12 D-Coded 10/100Mbps PoE ports + 2 x M12 X-Coded 10/100/1000Mbps ports with Bypass function
- **Console port** — M12 A-Coded
- **Power Connector** — M12 A-Coded

Physical

- **Enclosure** — Aluminum Shell
- **Protection Class** — IP 40
- **Installation** — Wall Mount
- **Dimensions (W x H x D)** — 216 x 132 x 59.3 mm
- **Weight** — 1.5kg

LED Display

- **System LEDs** — PWR1, PWR2, SYS, R.M., Alarm
- **Port LED** — Data, PoE

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** — 10 Watts
- **PoE Power Budget** — EKI-9510E-2GMPH: 120 Watts
  EKI-9510E-2GMPL: 60 Watts
- **Power Input** — EKI-9510E-2GMPH: 72/96/110 V$_{DC}$
  EKI-9510E-2GMPL: 24/48 V$_{DC}$
- **Operating Voltage** — EKI-9510E-2GMPH: 50.4~137.5 V$_{DC}$
  EKI-9510E-2GMPL: 16.8~60 V$_{DC}$
  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
- **Vibration** — IEC 61373
- **Certificate** — EN 50155; EN50121-3-2

L2 Features

- **L2 MAC Address** — 8K
- **Jumbo 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** — Broadcast, Multicast, Unknown unicast
- **Redundancy Protocol** — IEEE 802.1D-STP, IEEE 802.1s-MSTP, IEEE 802.1w-RSTP, X-Ring Pro

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
- **Link Aggregation** — IEEE 802.3ad Dynamic Port Trunking, Static Port Trunking

Dimensions

Unit: mm [inch]
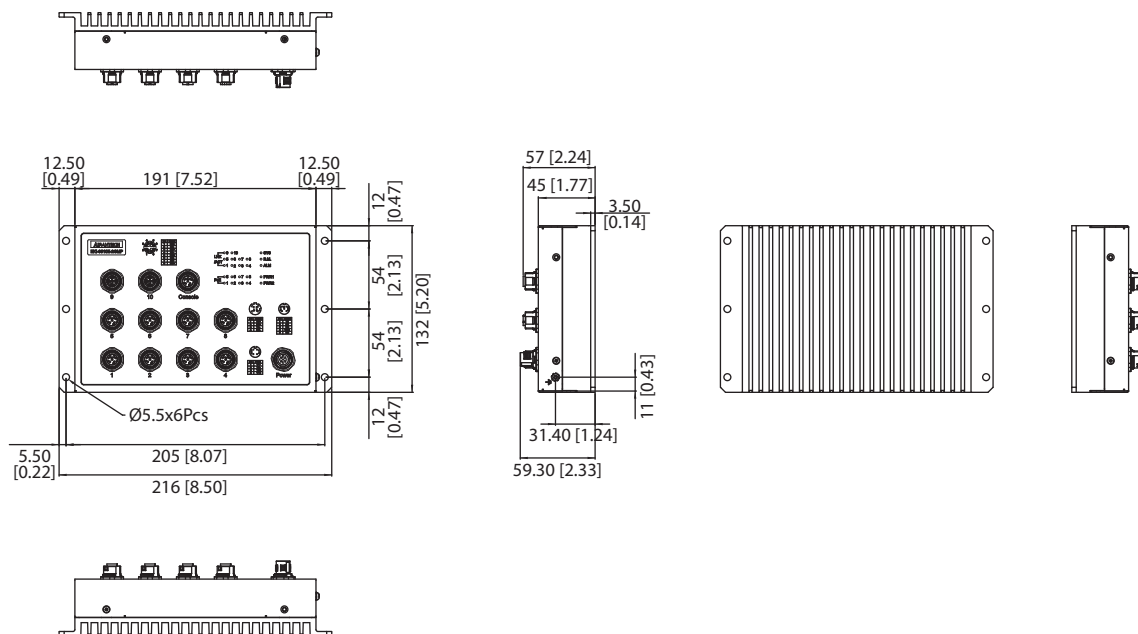
Security

- **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
- **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 server/client

Ordering Information

- **EKI-9510E-2GMPH-AE**   8 x M12 D-Coded PoE + 2 x M12 X-Coded Managed Ethernet Switch, 72/96/110V$_{DC}$ duall power input
- **EKI-9510E-2GMPL-AE**   8 x M12 D-Coded PoE + 2 x M12 X-Coded Managed Ethernet Switch, 24/48V$_{DC}$ duall power input

Accessories

PN		Description
OPT1-M12-CRP-4MD		Phoenix Contact M12 D-code 4 pin Male crimp type connector
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-4MD-150R		M12 D-code 4 pin Male to RJ45, cable length:1.5m
OPT1-M12C-8MX-150R		M12 X-code 8 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.)