



KIEN2000

8 Port Unmanaged
Industrial Ethernet Switch

CE, FCC, UL, RoHS

Overview

The KIEN2000 is an unmanaged 8-port industrial Ethernet rail switch. It offers two redundant 100Mbit/s fiber ports and six 10/100Base-T/TX TP ports. With the plug-and-play feature, it is started up shortly. KIEN2000 offers 24V redundant power inputs.

Features

- 10/100Base-T/TX Ethernet ports, adaptive, full/half duplex, Auto MDI/MDI-X connection
- 100Base-FX fiber ports, single mode/multimode, full duplex
- DT-Ring, high speed redundant ring network (recovery time <100ms)
- Alarm relay output for power.
- Store-and-forward switching mode conforms to IEEE802.3/802.U/802.3X
- EMC industrial level 4, complies with IEC61850 standard.
- Dual redundant 24VDC power supply (DC 18V~36V)
- Ribbed Aluminum housing for heat dissipation (fanless); Operation at -40 to 75°C(-40 to 167°F)
- IP40 protection class
- Easy DIN-Rail mounting or optional wall-mounting

Functions

100Mbit/s Optical Fiber Redundancy

In industrial fields, it is critical for the network to re-configure immediately once disconnection occurs. Accordingly, KIEN2000 comes with DT-Ring, developed by KYLAND, and offers 2 redundant fiber ports to realize the redundant ring network. The system will be able to re-configure within 300ms after connection fault.

LED Indicator

The LEDs of the front panel indicate the port status correctly including transmission rate, link status and system status.

Layer-2 Switching

Switches work in two ways: Cut-Through and Store-and-Forward. In Cut-Through, a data packet is immediately relayed after detecting the target address; in Store-and-Forward, a data packet is first read-in completely and checked for errors before the switch relays the same. KIEN2000 employs Store-and-Forward—a switching mode widely used.

Power Alarm

In the event of a power failure in a KIEN2000, an alarm signal will be sent out by alarm terminal. The terminal is open when there is no alarm and closed when the alarm sounds.

Technical Specifications

Standard

IEEE802.3
IEEE802.3U
IEEE802.3X
Store and forward switching mode

Network

Ring, chain and star network topology.

Service

Diagnostics: LEDs (power, link status, port rate) fault relays (24VDC/1A)

Interface

2 x 100Base-FX, optical fiber cable, redundant, duplex
6 x 10 /100Base-T/TX, TP cable, RJ45 Socket (shielded), auto-negotiation, auto-polarity

Power Requirements

Power input: 24VDC (18-36VDC) dual redundant, 110VDC, 220VAC
Power consumption: <6W

Physical Characteristics

Casing: IP40 protection
Ribbed Aluminum housing fanless design
Dimensions(WxHxD): 55.4x142x120.5 mm (2.18x5.59x4.74 in.)
Weight: 1000g (2.205 pounds)
Installation: DIN-Rail or wall mounting

Environmental Limits

Operating Temperature: -40 to 75°C(-40 to 167°F)
Storage Temperature: -45 to 85°C (-49 to 185°F)
Ambient Relative Humidity: 0 to 95% (non-condensing)

Approvals

EMC interference immunity:
IEC61000-4-2(ESD): ±4KV contact discharge, ±8KV air discharge
IEC61000-4-3(RS): 10V/M (80-1000MHz)
IEC61000-4-4(EFT): ±2KV power line, ±1KV data line
IEC61000-4-5(Surge): ±2KV(line/earth), ±1KV (line/line)power line, ±1KV data line
IEC61000-4-6(CS): 3V(10KHZ~150KHZ), 10V(150KHZ~80KHZ)

EMC emitted immunity:

FCC CFR47 Part15: FCC CFR47 Part 15 Class A
EN55022: EN55022 Class A
UL60950, CE, FCC, UL, ROHS

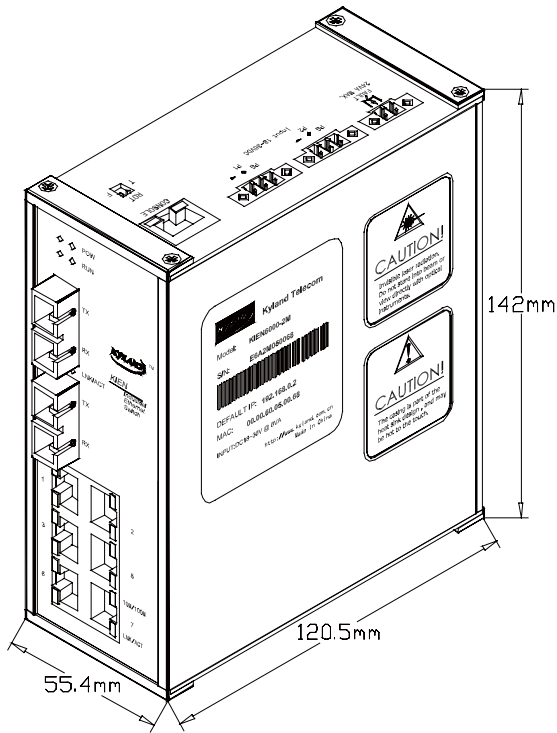
MTBF

35 years

Warranty

5 Years

Mechanical Drawing



Ordering Information

Model	Description
KIEN2000-2S	2 x 100Mbit/s, single mode, redundant 6 x 10 /100Base-T/TX
KIEN2000-2M	2 x 100Mbit/s, multi mode, redundant 6 x 10 /100Base-T/TX