

KIEN1005

5 Port Unmanaged Din-Rail Switch



- 4 10/100Base-TX ports and 1 Fast Ethernet fiber/RJ45 optional port
- Uplink port supports broadcast storm control and QoS functions
- EMC performance reaches industrial level 4
- IP40 protection class
- CE, FCC, DNV certificates



Overview

The KIEN1005 series of industrial Ethernet switches are entry-level industrial 5 port Ethernet switches that support IEEE 802.3/802.3u/802.3x with 10/100M, full/half-duplex, MDI/MDIX auto-sensing RJ45 ports. The KIEN1005 switches are rated to operate at temperatures ranging from -40 to 85°C, and are rugged enough for any harsh industrial environment. The switches can support not only 9-36VDC power supply but also 85-264VAC power supply eliminating extra external power supplies. KIEN1005 can be easily installed on a DIN-Rail as well as in panel mounting distribution boxes. The DIN-Rail mounting capability, wide operating temperature, and the IP40 housing with LED indicators make the plug-and-play KIEN1005 switches easy to use and reliable.

Technical Specifications

Standard

IEEE 802.3i
IEEE 802.3u
IEEE802.3x

Switch Properties

MAC Table: 1K
Packet Buffer: 512Kbit
Packet Forwarding Rate: 0.8Mpps
Switching Delay: <5µs

Interface

Fast Ethernet Fiber Ports: max 1 100Base-FX, SM/MM port, FC/SC/ST connector

Fast Ethernet RJ45 Ports: max 5 10/100Base-TX RJ45 ports

LED

LEDs on Front Panel:

Power LED: PWR

Interface LED: Link/ACT, Speed (RJ45 port)

Transmission Distance

Twisted Pair:

100m (Standard CAT5, CAT5e network cable)

Multi Mode Fiber:

1310nm, 5km (100M)

Single Mode Fiber:

1310nm, 40km/60km (100M)

1550nm, 60km/80km (100M)

Power Requirements

Power Input:

12DCW (9-36VDC), 220AC (85-265VAC)

Power Terminal:

3-pin 3.81mm-spacing plug-in

Overload Protection: Support

Reverse Connection Protection: Support

Physical Characteristics

Housing: Aluminum, fanless
 Protection Class: IP40
 Dimensions (WxHxD):
 36.5x120x90 mm (1.44x4.72x3.54 in.)
 Weight: 0.3kg (0.661 pound)
 Mounting: DIN-Rail or Panel mounting

Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)
 Storage Temperature: -40 to 85°C (-40 to 185°F)
 Ambient Relative Humidity: 5 to 95% (non-condensing)

MTBF

454,730 hrs

Warranty

5 years

Approvals

CE, FCC, DNV

Industrial Standard

EMI:
 FCC CFR47 Part 15, EN55022/CISPR22, Class A

EMS:

IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
 IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
 IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
 IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
 IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
 IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

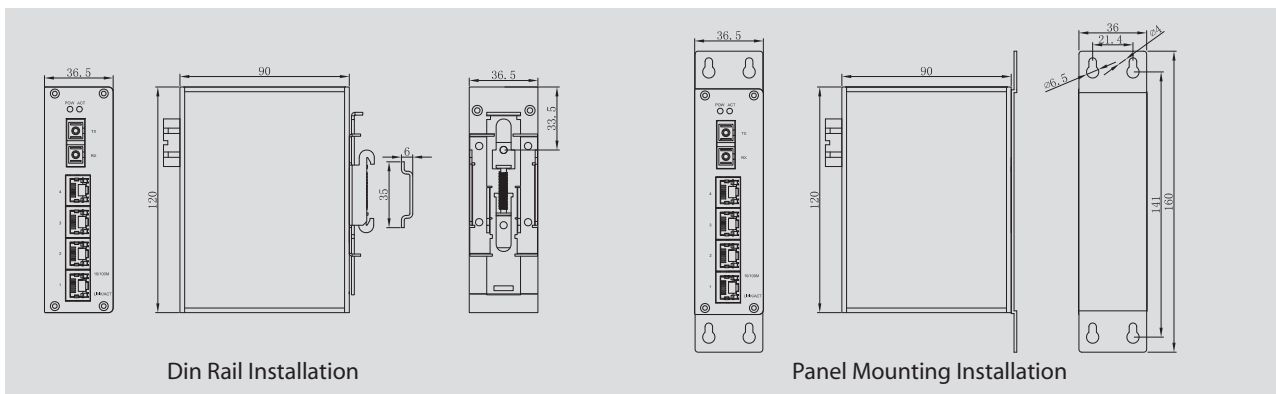
Machinery:

IEC60068-2-6 (Vibration)
 IEC60068-2-27 (Shock)
 IEC60068-2-32 (Free Fall)

Industry: IEC61000-6-2

Railway: EN50155, EN50121-4

Marine: DNV

Mechanical Drawing**Ordering Information**

KIEN1005 - _____ - _____ - _____ - _____
 Ports Distance Connector PS

Ports

5T = 5 10/100Base-TX RJ45 ports
 1M-4T = 1 100Base-FX multi mode fiber port, 4 10/100Base-TX RJ45 ports
 1S-4T = 1 100Base-FX single mode fiber port, 4 10/100Base-TX RJ45 ports

Distance: Fiber Distance

1310-5 = 1310nm, 5km
 1310-40 = 1310nm, 40km
 1310-60 = 1310nm, 60km
 1550-80 = 1550nm, 80km

Connector: Fiber Connector

SC = SC Connector
 ST = ST Connector
 FC = FC Connector

PS: Power Supply

12DCW = 9-36VDC, dual redundant power inputs
 220AC = 85-265VAC, single power input