KIEN1000
KIEN2000

8 Port Unmanaged Din-Rail Switch

- Supports DT-Ring Protocols (KIEN1000, KIEN2000 only)
- 8 10/100Base-TX ports (KIEN1000, KIEN1000B), 2 100Base-FX fiber ports and 6 10/100Base-TX RJ45 ports (KIEN2000, KIEN2000B)
- EMC performance reaches industrial level 4
- IP40 protection class
- UL, CE, FCC certificates

Overview

The KIEN1000/KIEN2000 series of industrial Ethernet switches are entry-level industrial 8 port Ethernet switches that support IEEE 802.3/802.3u/802.3x with 10/100M, full/half-duplex, MDI/MDIX auto-sensing RJ45 ports. These industrial Ethernet switches are rated to operate at temperatures ranging from -40 to 85°C, and are rugged enough for any harsh industrial environment.

KIEN1000, with 8 port 10/100Base-TX RJ45 ports, supports DT-Ring protocol which enables a fast recovery redundant ring topology. KIEN1000B, with 8 port 10/100Base-TX RJ45 ports, is entry level version without the support with ring topology. KIEN2000, with 2 100Base-FX fiber ports and 6 10/100Base-TX RJ45 ports, supports DT-Ring protocol which enables a fast recovery redundant ring topology. KIEN2000B, with 2 100Base-FX fiber ports and 6 10/100Base-TX RJ45 ports, is entry level version without the support with ring topology.

The switches can support not only 12VDC/24VDC/48VDC power supply but also 110VDC/220VDC/110VAC/220VAC power supply eliminating extra external power supplies. KIEN1000/KIEN2000 series 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 KIEN1000/KIEN2000 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: 1.2Mpps
Switching Delay: <5μs

Interface
KIEN1000/KIEN1000B
Fast Ethernet Ports: 8 10/100Base-TX RJ45 ports

KIEN2000/KIEN2000B
Fast Ethernet Fiber Ports: 2 100Base-FX, SM/MM ports, FC/SC/ST connector
Fast Ethernet RJ45 Ports: 6 10/100Base-TX RJ45 ports

Alarm Contact: 2-pin 3.81mm-spacing terminal block, 1A@30VDC, 0.5A@125VAC

LED
LEDs on Front Panel:
Redundant Mode LED: Run1, Run2
Power LED: PWR1, PWR2
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: 12DC(9-18VDC),24DC (18-36VDC), 48DC (36-72VDC), 110DC (72-140VDC), 220DC(154-300VDC),220AC(110-264VAC)
Power Terminal: 3-pin 3.81mm-spacing plug-in terminal block
Power Consumption: <6W

Overload Protection: Support
Reverse Connection Protection: Support
Redundancy Protection: Support

Physical Characteristics

Housing: Aluminum, fanless
Protection Class: IP40
Dimensions (W×H×D): 55.4×139×119.5 mm (2.18×5.47×4.70 in.)
Weight: 0.6kg (1.323 pound)
Mounting: DIN-Rail or Panel mounting

Environmental Limits

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

MTBF

414,430 hrs

Warranty

5 years

Approvals

UL, CE, FCC

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)
IEC61000-4-8 (Power frequency magnetic field): 100A/m (cont.), 1000A/m (1s-3s)
IEC61000-4-9 (Pulsed magnetic field): 1000A/m
IEC61000-4-10 (Damped oscillation): 100A/m
IEC61000-4-12 (Oscillatory wave): 2.5kV/CM, 1kV/DM
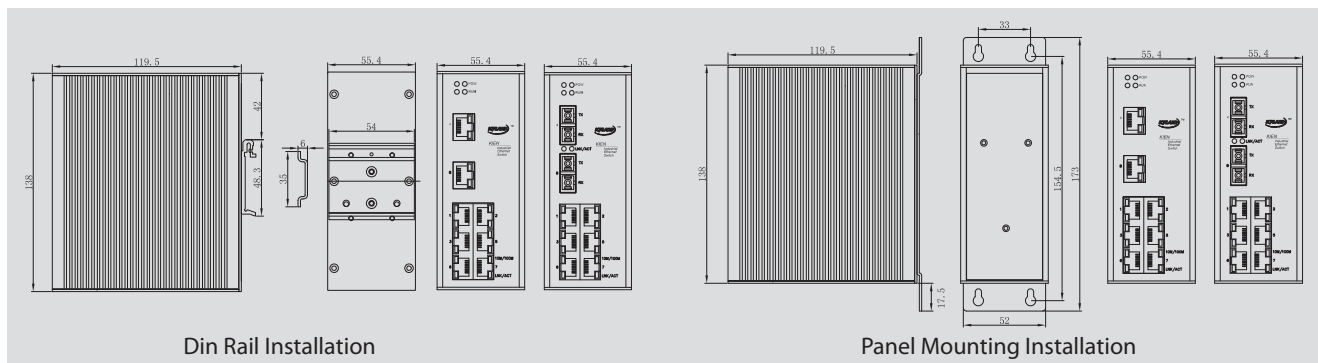IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)
Machinery:
IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)
Industry: IEC61000-6-2
Railway: EN50155, EN50121-4

⟫ Mechanical Drawing

Din Rail Installation

Panel Mounting Installation

⟫ Ordering Information

_____ - _____ - _____ - ___
Model & Ports   Distance   Connector   PS

Model & Ports

KIEN1000B-8T = 8 10/100Base-TX RJ45 ports
KIEN1000-8T = 8 10/100Base-TX RJ45 ports, support DT-Ring
KIEN2000B-1M-6T = 1 100Base-FX multi mode fiber ports, 6 10/100Base-TX RJ45 ports
KIEN2000B-1S-6T = 1 100Base-FX single mode fiber ports, 6 10/100Base-TX RJ45 ports
KIEN2000B-2M-6T = 2 100Base-FX multi mode fiber ports, 6 10/100Base-TX RJ45 ports
KIEN2000B-2S-6T = 2 100Base-FX single mode fiber ports, 6 10/100Base-TX RJ45 ports
KIEN2000-2M-6T = 2 100Base-FX multi mode fiber ports, 6 10/100Base-TX RJ45 ports, support DT-Ring
KIEN2000-2S-6T = 2 100Base-FX single mode fiber ports, 6 10/100Base-TX RJ45 ports, support DT-Ring

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

12DC = 9-18VDC, dual redundant power inputs
24DC = 18-36VDC, dual redundant power inputs
48DC = 36-72VDC, dual redundant power inputs
110DC = 77-150VDC, dual redundant power inputs
220DC = 120-375VDC, dual redundant power inputs
220AC = 85-265VAC, single power input

Example Order Codes

KIEN1000-8T-220AC
8 10/100Base-TX copper ports, 110-264VAC power supply