KIEN1005

↗ Overview

KIEN1005 simple industrial Ethernet rail switch is specially designed for industrial applications. It offers five TX ports with adaptive function, which enables it to configure automatically as 10Base−T or 100Base−TX, full−duplex or half−duplex mode. With the plug−and−play feature, it is started up shortly.

↗ Features

Reliable Industrial Ethernet Switching Technology

1. High−performance industrial Ethernet switching

2. 10/100Base−T(X)(RJ45), 100Base−FX(SC, FC or ST connector, single mode / multimode)

3. Broadcast storm protection

4. Supports IEEE802.3/802.3U/802.3X

5. Store and forward switching mode

6. 10/100Base−T/TX, full/half duplex, MDI/MDI−X adaptive

7. QoS(default high priority) service for the 5th port

8. Backplane switching capacity of 1G

9. Transmission delay less than 6us

10. TVS (Transient Voltage Suppressor) protection of 1KV for Ethernet ports.

Industrial Reliability

1. Wide range operating temperature: −35℃ ~ 75℃

2. Power input of 12V~36VDC,custom for110VDC,220VDC/VAC

3. Reverse polarity connection protection for power supply

4. IP30 protection class with aluminum casing

5. DIN−Rail or Wall−mounting

Customization

1. DC110V or DC/AC 220V module

2. Transmission distance: 60KM、80KM、120KM

3. OEM/ODM

↗ Main Functions

Industrial Design for Power Supply

KIEN1005 series offers alternative power supply modules including DC12V−36V, DC110V and DC/AC220V. It comes with electromagnetic protection technology and has been certificated as industrial level four. For the installation requirements, it

provides protections against reverse polarity connection, over–current, and over–voltage.

Broadcast Storm Protection

KIEN1005 offers broadcast storm protection to ensure effective transmission of valid data and discard invalid data.

QoS for Port

QoS(Default low priority) service is available in the 5th port of KIEN1005 series. So KIEN1005 series would be your optimal choice if your application contains very important communication devices.

↗ Parameters

Product Description

Model：KIEN1005

Description：Unmanaged Industrial Ethernet Rail Switch, store and forward switching mode, Ethernet (10 Mbit/s) and Fast–Ethernet (100 Mbit/s)

Port Type and Quantity：5 x 10/100Base–T/TX, TP cable, RJ45 socket, MDI/MDI–X auto connection

4 x 10/100Base–T/TX, TP cable, RJ45 socket, MDI/MDI–X auto connection1 x 100 Base–FX, SC/FC/ST, single–Mode / multimode

Backplane switching capacity：1G

More Interface

Power Terminal：1 x DC power terminal, 3pin

Network size – length of cable

Twisted pair (TP)：100m

Multimode fiber：Distance: 5km Wavelength: 1310nm–Optical power: >–20dbm

Single mode fiber：Distance: 40kmWavelength: 1310nmOptical power: >–13dbm

Network size – cascadibility

Line – / star topology：Any

Power requirements

Power input：12V~36V

Power consumption：3.5W

Performance

Transfer Rate：148810PPS

MAC Address Table Size：1K

Service

Diagnostics：LEDs(power, link status, port rate,)

Port priority：QoS for 5th port (default high priority)

Current over–load protection：Yes(AC220V)

Reverse polarity power connection protection：Yes

Broadcast storm protection：Yes

Ambient conditions

Operating temperature：–35℃ to +75℃

Storage/transport temperature：–45℃ to +85℃

Relative humidity (non–condensing)：10% to 95%

MTBF：35years/MIL–HDBK–217F 25℃

Mechanical construction

Dimensions (W x H x D)：36.5 x 120 x 90mm

Mounting：DIN–Rail or wall–mounting

Protection class：IP30 aluminum, fanless

EMC interference immunity

EN 61000–4–2 electrostatic discharge (ESD)：±8 kV contact discharge, ±15 kV air discharge

EN 61000–4–3 electromagnetic field：10 V/m (80 – 1000 MHz)

EN 61000–4–4 fast transients (burst)：±4 KV power line, ±2 kV data line

EN 61000–4–5 surge voltage：Power line: ±4 kV (line/earth), ±2 kV (line/line), ±2 kV data line

EN 61000–4–6 conducted immunity：3V (10 kHz – 150 kHz), 10 V (150 kHz – 80 MHz)

EMC emitted immunity

FCC CFR47 Part 15：FCC CFR47 Part 15 Class A

Vibration：IEC60068-2-6

Shock：IEC60068-2-27

Free Fall：IEC60068-2-32

Approvals

Certificate：FCC, CE, UL (under processing)

Environment protection：RoHS

Warranty：5 years

Customization：DC110V or DC/AC220V

Optical fiber: 60KM, 80KM, 120KM`

↗ Order Information

Model	Description
KIEN1005	5 x 10/100Base-T/TX
KIEN1005-1M-SC	4 x 10/100Base-T/TX, 1 x 100 Base-FX, multimode, SC
KIEN1005-1M-FC	4 x 10/100Base-T/TX, 1 x 100 Base-FX, multimode, FC
KIEN1005-1M-ST	4 x 10/100Base-T/TX, 1 x 100 Base-FX, multimode, ST
KIEN1005-1S-SC	4 x 10/100Base-T/TX, 1 x 100 Base-FX, single mode, SC
KIEN1005-1S-FC	4 x 10/100Base-T/TX, 1 x 100 Base-FX, single mode, FC
KIEN1005-1S-ST	4 x 10/100Base-T/TX, 1 x 100 Base-FX, single mode, ST

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