KYLAND

KIEN1000

Overview

KIEN1000 8–port unmanaged industrial Ethernet rail switch is specially designed for industrial applications. It provides two redundant TP ports that can be connected into self–healing ring network, and six common TP ports. With the plug–and–play feature, it is started up shortly. KIEN1000 offers 24V redundant power inputs.

Features

High–performance Industrial Ethernet Switch

1.10/100Base–T/TX Ethernet ports, adaptive, full/half duplex, Auto MDI/MDI–X connection

2.High speed redundant ring network (recovery time <300ms)

3.Alarm relay output for power.

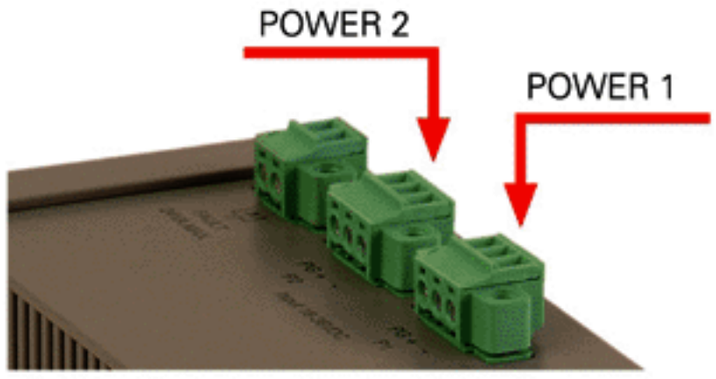
4.Store–and–forward switching mode conforms to IEEE802.3/802.U/802.3X

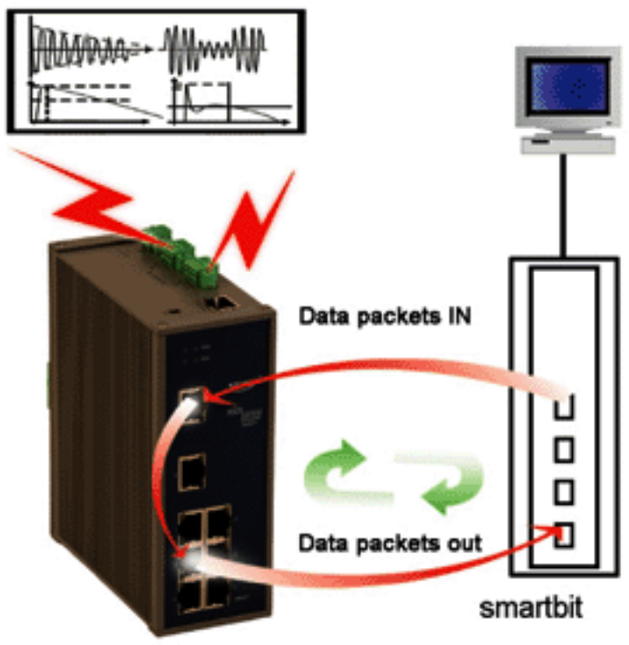
Industrial Power Supply

1.Industrial power input of DC24V (DC18V ~ 36V) .

2.Reliable protection for EMC and against over–current/over–voltage.

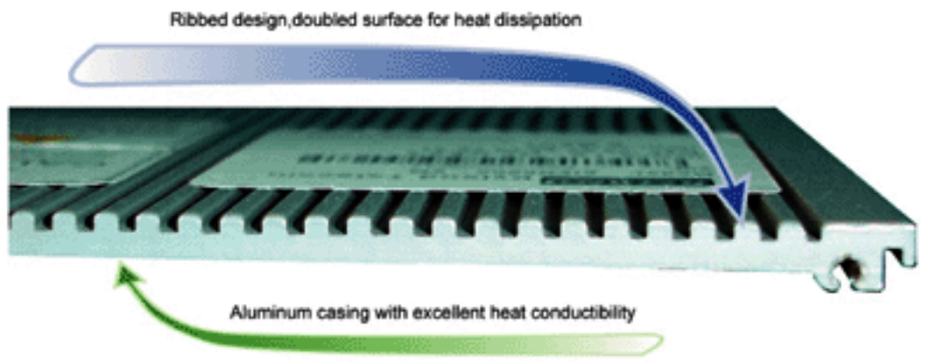
3.Redundant power input.





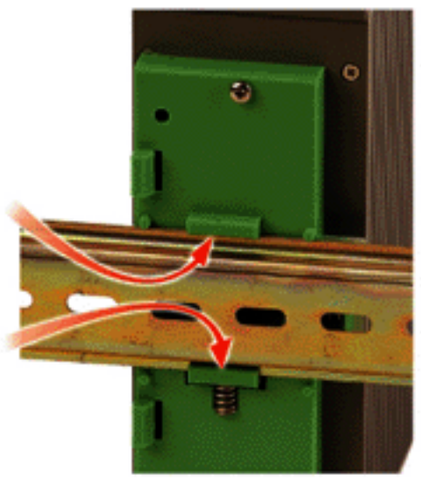
Rugged Design

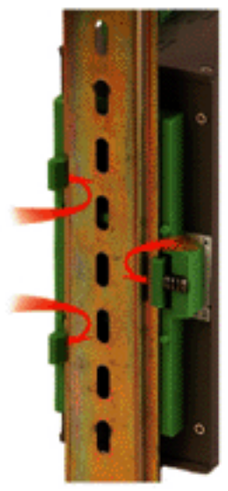
1.Ribbed heat–removal design(fanless); operation at –35℃ to +75℃



2.Solid IP40 housing

3.Easy DIN–Rail mounting or optional wall–mounting

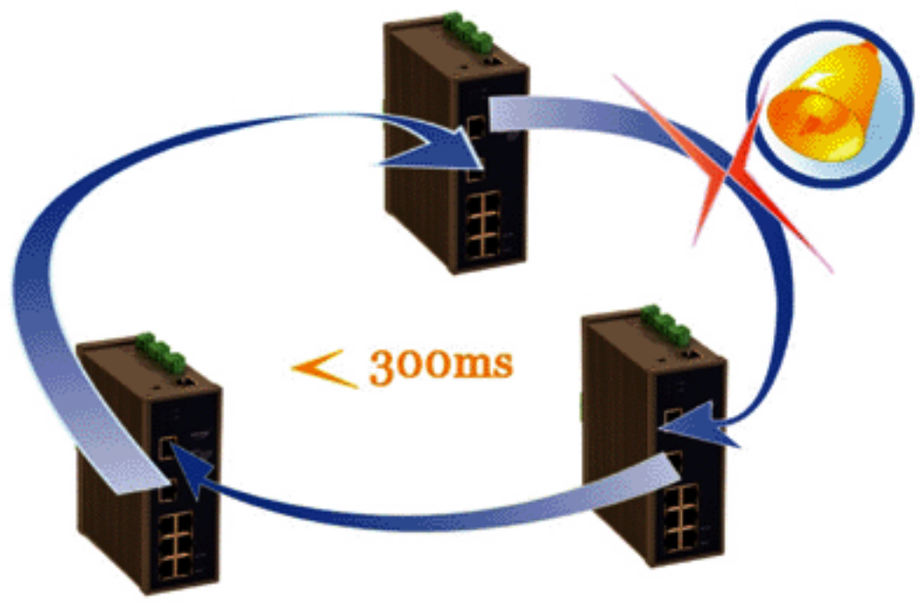




Main Functions

100Mbit/s TP Cable Redundancy

KIEN1000 offers 2 redundant Ethernet ports to be connected into redundant ring network through TP cable. The system will be able to re–configure within 300ms once disconnection occurs.



LED Indicator

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

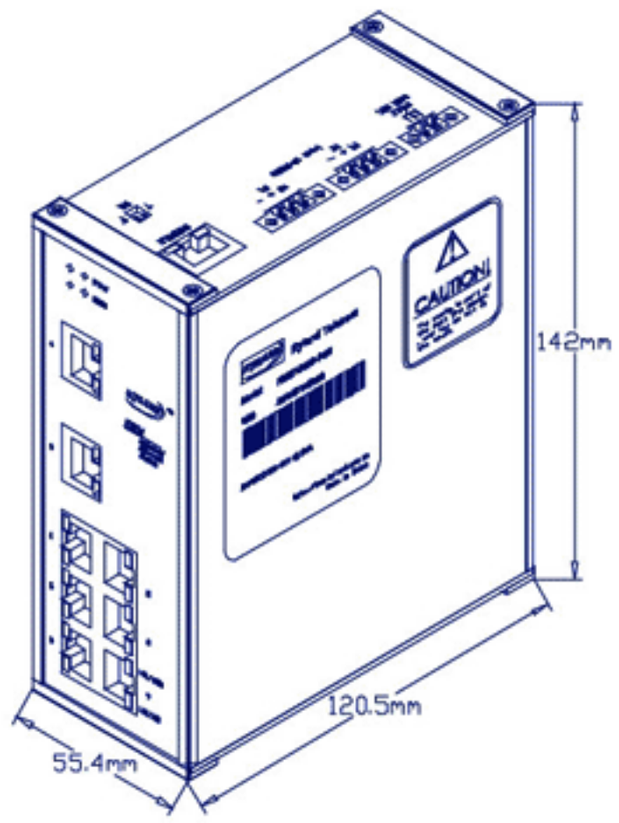
Layer–2 Switching

Switches work in two ways: Cut–Through and Store–and–Forward. In Cut–Through, a data packet is immediately relayed further 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. KIEN1000 employs Store–and–Forward that is a switching mode widely used.

Power Alarming

Any power of KIEN1000 fails, alarm signal will be sent out by alarm terminal. The terminal is open when there is no alarm and is closed when alarm occurs.

Dimensions： 55.4mm x 142mm x 120.5mm(W x H x D)



Overview

Product Description

Model： KIEN1000

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：

2 x 100Mbit/s, TP cable, RJ45 socket (shielded), redundant, auto-Negotiation

6 x 10/100Base-T/TX, TP cable, RJ45 socket (shielded), Auto-Negotiation, auto MDI/MDI-X connection

More Interface

Power Terminal： 2 x DC power terminal, 3-core

Alarm Terminal： 1 x alarm output terminal, 2-core

Network size – length of cable

Twisted pair (TP)： 100m

Network size – cascadibility

Line / star topology： Any

Ring structure (DT-Ring)： 50 Switches (recovery time < 300m)

Power requirements

Power input： 18V – 36V redundant DC power input

Power consumption： <6W

Performance

Transfer Rate： 148810pps

MAC Address Table Size： 1K

Service

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

Redundancy

Redundancy functions： DT-Ring (ring structure), redundant 24V power suppy

Ambient conditions

Operating temperature： -35℃ to +75℃

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

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

MTBF： 10 years

Mechanical construction

Dimensions (W x H x D)： 55.4mm x 142mm x 120.5mm

Mounting： DIN-Rail or Wall mounting

Protection class： IP40

EMC interference immunity

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

EN 61000-4-3 electromagnetic field： 110 V/m (80 – 1000 MHz)

EN 61000-4-4 fast transients (burst)： ±2 KV power line, ±1 kV data line

EN 61000-4-5 surge voltage： Power line: ±2 kV (line/earth), ±1 kV (line/line), ±1 kV data line

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

EMC emitted immunity

FCC CFR47 Part 15： FCC CFR47 Part 15 Class A

EN 55022： EN 55022 Class A

Approvals

Certificate： FCC, CE, UL

Order Information

Model	Description
KIEN1000-8TX	2 x 100Mbit/s, redundant, TP cable; 6 x 10/100Base-T/TX, TP cable