

# **KIEN7009**

## 9 port layer 2 simple managed DIN-Rail switches



# Overview

KIEN7009 is one of Kyland green low power consumption industrial Ethernet switch series. It is equipped with 3 100Base-FX optic ports and 6 10/100Base-TX copper ports, making it ideal for building a fast Ethernet fiber optic ring and leaving a spare fiber port for uplink use. KIEN7009 is a light managed device, supports DT-Ring, DRP/DHP, VLAN and other protocols to increase system reliability. It is designed especially for harsh environments with wide operating temperature range, EMC level 4, IP40 protection class, It certified by CE, FCC, UL508 and CID2, and can be deployed in wind power, distribution network, automation, transportation, oil & gas and many other industrial applications.

# Key Features

3 fast Ethernet fiber/RJ45 optional ports, 6 10/100Base-T(X) ports
Supports DT-Ring and DRP/DHP protocols
Supports one-key recovery
Provides Mini USB Console port
UL508, Class I Div 2, CE, FCC certificate



## Product Specifications

#### >Software Functions

#### -Switching

Support VLAN, PVLAN

Support port flow control (New)

Support port speed limit (New)

### -Redundancy

Support DT-Ring, DT-Ring+, DT-VLAN with the recovery time < 50ms

Support DRP/DHP with the recovery time < 20ms

Support STP/RSTP (New)

#### -Service Quality

Support SP, WRR queue scheduling (New)

#### -Management & Maintenance

Support Console, Telnet, WEB management methods

Support SNMPv1/v2c/v3, Kyvision centralized management

Support software upgrade by FTP and TFTP

Support power, port and ring alarm

Support RMON

Support port mirroring (New)

Support LLDP

Support Link-check

#### -IP Management

Support DHCP client (New)

#### >Technical Specifications

#### -Standard

IEEE 802.3i(10Base-T)

IEEE 802.3u(100Base-T and 100Base-FX)

IEEE 802.3x(Flow Control)

IEEE 802.1p (Class of Service)



IEEE 802.1Q(VLAN)

IEEE 802.1w (RSTP)

#### -Switch Properties

**Priority Queues: 4** 

Number of VLANs: 256

VLAN ID: 1-4093

MAC Table: 8K

Packet Buffer: 1Mbit

Packet Forwarding Rate: 1.4Mpps

Switching Delay: <5 µs

#### -Interface

**Fast Ethernet Port:** 

100Base-FX, SM/MM, SC/ST/FC connector

10/100Base-T(X), RJ45 port

Console Port: Mini USB

**Alarm Contact:** 

3-pin 5.08mm-spacing plug-in terminal block,250VAC/220VDC Max,2A Max

#### -Ethernet ports, fibre optic cables

Wavelength: 1310 nm (Fast Ethernet Basic)

Output capacity in dBm: -20 dBm ...-13 dBm (MM) / -12 dBm ...-4 dBm (SM) (Fast Ethernet Basic)

Receiver sensitivity: ≤-31 dBm (MM) / ≤ -34 dBm (SM) (Fast Ethernet Basic)

#### -LED

**LEDs on Front Panel** 

Running LED: Run

Alarm LED: Alarm (12/24/48VDC model only)

Power LED: PWR1,PWR2

Ring LED: Ring

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

#### -Button

Reset: Reboot and restore default configuration



#### -Power Requirements

Power Input:

100-240VAC, 50/60Hz; 110-220VDC(85-264VAC/77-300VDC)

24-48VDC(18-72VDC)

12-24VDC(9-36VDC)

**Power Terminal:** 

5-pin 5.08mm-spacing plug-in terminal block

Power Consumption: < 8.1w

**Overload Protection: Support** 

**Reverse Protection: Support** 

Redundancy Protection: Support (12/24/48VDC)

#### -Physical Characteristics

Housing: Metal

Cooling: Natural convection, fanless

**Protection Class: IP40** 

Dimension:

53.6mm×135mm×106.5mm(W×H×D) (12/24/48VDC)

66mm×135mm×107.5mm (W×H×D) (220VAC/DC)

Weight: 0.76Kg

Mounting: DIN-Rail or Panel Mounting

#### -Environmental Limits

**Operating Temperature:** 

-40°C to +85°C(12/24/48VDC)

-40°C to +75°C(220VAC/DC)

Storage Temperature: -40°C to +85°C

Ambient Relative Humidity: 5-95% (non-condensing)

#### -Quality Assurance

MTBF: 385000 hrs

Warranty: 5 years

#### -Approvals

CE(EMC), CE(LVD), FCC: Models with HV:100-240VAC,50/60Hz;110-220VDC



UL508, Class I Div 2: Models with L2:24-48VDC

CE(EMC), FCC: Models with L2:24-48VDC and L5:12-24VDC

IEC 60950-1, EN 60950-1

#### -Industry Standard

EMI:

FCC CFR47 Part 15,EN55022/CISPR22,Class A

EMS:

IEC61000-4-2(ESD)  $\pm 8kV(contact), \pm 15kV(air)$ 

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) 10V (150kHz-80MHz)

Machinery:

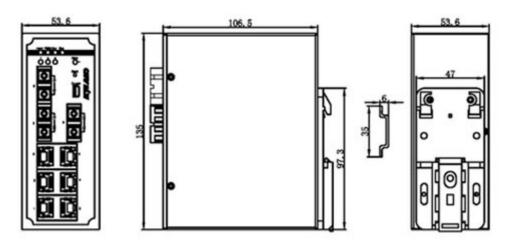
IEC60068-2-6 (Vibration)

IEC60068-2-27 (Shock)

IEC60068-2-32 (Free Fall)

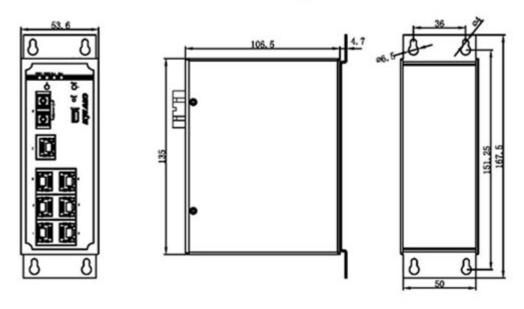


# KIEN7009 DIN Rail Mounting

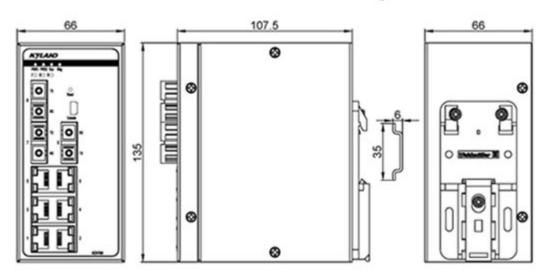




## KIEN7009 Panel Mounting



## KIEN7009-HV DIN Rail Mounting





## **Ordering Information**

#### KIEN7009-Ports-Connector-PS1-PS2 KIEN7009-Ports-Connector-PS1

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3S6T 3x100Base-FX, single mode fiber port; 6x10/100Base-T(X) RJ45 ports
3M6T 3x100Base-FX, multi mode fiber port; 6x10/100Base-T(X) RJ45 ports

1×100Base-FX, single mode fiber port; 2×100Base-FX, multi mode fiber ports;

6×10/100Base-T(X) RJ45 ports

2×100Base-FX, single mode fiber ports; 1×100Base-FX, multi mode fiber port;

6×10/100Base-T(X) RJ45 ports

2x100Base-FX, single mode fiber port; 6x10/100Base-T(X) RJ45 ports
2x100Base-FX, multi mode fiber port; 6x10/100Base-T(X) RJ45 ports
2x100Base-FX, single mode fiber port; 4x10/100Base-T(X) RJ45 ports
2x100Base-FX, multi mode fiber port; 4x10/100Base-T(X) RJ45 ports
1x100Base-FX, single mode fiber port; 7x10/100Base-T(X) RJ45 ports



1M7T 1x100Base-FX, multi mode fiber port; 7x10/100Base-T(X) RJ45 ports

8T 8x10/100Base-T(X) RJ45 ports
Connector 100M fiber port specifications

SC05 SC connector, multi-mode, 1310nm, 5km ST05 ST connector, multi-mode, 1310nm, 5km FC05 FC connector, multi-mode, 1310nm, 5km **SC40** SC connector, single-mode, 1310nm, 40km ST40 ST connector, single-mode, 1310nm, 40km FC40 FC connector, single-mode, 1310nm, 40km SC60 SC connector, single-mode, 1310nm, 60km **SC80** SC connector, single-mode, 1550nm, 80km

NA No 100Base-FX fiber port

PS1-PS2

L2-L2 24-48VDC (18-72VDC), redundant power inputs L5-L5 12-24VDC (9-36VDC), redundant power inputs

PS1

HV 100-240VAC, 50/60Hz; 110-220VDC (85-264VAC/77-300VDC), single power input

Accessories

DT-BGAZ-02 Panel for panel mounting
DT-FCZ-RJ45-01 Dustproof cover for RJ45 port

DT-XL-Mini USB-USB-2m Mini USB to USB cable for Console management, 2m

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