# **KIEN7009**



# 9 Port Layer 2 Simple Managed **DIN-Rail Switches**

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





## 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, 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.



### 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 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)

# Product Specifications

#### **Technical Parameters**

#### 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 <5µs

#### 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

#### **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 Requirement**

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

Cooling Natural convection, fanless

Protection Class IP40

Dimension

- 53.6mm×135mm×106.5mm(W×H×D) (12/24/48VDC)
- ▼ 66mm×135mm×106.5mm (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)

#### Warranty

**MTBF** 385,000 hrs Warranty 5 years

#### **Approvals**

UL508, Class I Div 2: Models with L2:24-48VDC CE(EMC), FCC: Models with L2:24-48VDC and L5:12-24VDC UL certified max operating temperature is 75°C.

#### **Industry Standard**

#### EMI

▼ FCC CFR47 Part 15,EN55022/CISPR22,Class A

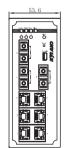
- ▼ IEC61000-4-2(ESD) ±8kV(contact),±15kV(air)
- ▼ IEC61000-4-3(RS) 10V/m(80MHz-2GHz)
- IEC61000-4-4(EFT) Power Port:±4kV;Data Port:±2kV
- ▼ IEC61000-4-5(Surge) Power Port: ±2kV/DM, ±4kV/CM; Data Port:±2kV
- ▼ IEC61000-4-6(CS) 10V (150kHz-80MHz)

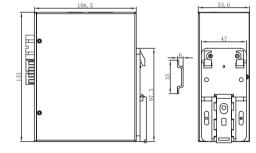
#### Machinery

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

# Mechanical Drawing

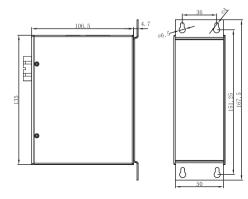
Din Rail Mounting (Low voltage version)



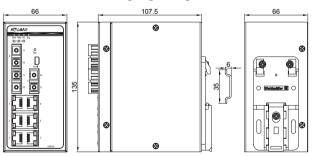


Panel Mounting (Low voltage version)





#### Din Rail Mounting (High voltage version)





# >> Ordering Information

	KIEN7009-Ports-Connector-PS1-PS2
	KIEN7009-Ports-Connector-PS1
Ports	
3S6T	3×100Base-FX, single mode fiber ports; 6×10/100Base-T(X) RJ45 ports
3M6T	3×100Base-FX, multi mode fiber port; 6×10/100Base-T(X) RJ45 ports
2S6T	2×100Base-FX, single mode fiber ports; 6×10/100Base-T(X) RJ45 ports
2M6T	2×100Base-FX, multi mode fiber port; 6×10/100Base-T(X) RJ45 ports
2S4T	2×100Base-FX, single mode fiber ports; 4×10/100Base-T(X) RJ45 ports
2M4T	2×100Base-FX, multi mode fiber port; 4×10/100Base-T(X) RJ45 ports
1S7T	1×100Base-FX, single mode fiber port; 7×10/100Base-T(X) RJ45 ports
1M7T	1×100Base-FX, multi mode fiber port; 7×10/100Base-T(X) RJ45 ports
8T	8×10/100Base-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
None	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

Accessory Model	Description
DT-BGAZ-02	Panel for panel mounting (12/24/48VDC Model)
DT-BGAZ-09	Panel for panel mounting (220VAC/DC Model)
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port
DT-XL-Mini USB-USB-2m	Mini USB to USB cable for Console management, 2m