

# KIEN5000 KIEN6000

## Layer 2 8 Port Simple Managed Din-Rail Switch



- Simple managed industrial Ethernet switches
- 8 10/100Base-TX ports (KIEN5000)
- 6 10/100Base-TX ports, 2 100M fiber ports (KIEN6000)
- Supports DT-Ring protocol and STP
- EMC performance reaches industrial level 4
- IP40 protection class
- CE, FCC certificates
- High voltage AC/DC power supplies supported



### Overview

KIEN5000/KIEN6000, 8-port managed DIN-Rail industrial Ethernet switches, comes with DT-Ring technology which is developed by Kyland and used to set up a redundant Ethernet ring network. KIEN5000/KIEN6000 support not only 12VDC, 24VDC and 48VDC with dual redundant power inputs, but also support high voltage AC/DC power supplies. With a web-based configuration interface, KIEN5000/KIEN6000 ensure an easy installation and management of the switches.

### Features & Benefits

1. Redundancy Technology: supports DT-Ring protocol (recovery time < 100ms) and STP
2. Multicast Protocol: supports IGMP Snooping and static multicast
3. Network Partition: supports VLAN, PVLAN
4. Service Quality: supports QoS
5. Bandwidth Management: supports port trunking, port speed limit, broadcast storm control
6. Network Management and Monitoring: supports CLI, Telnet, WEB management methods, Kyvision centralized management, SNMPv1/v2/v3, LLDP
7. Network Security: supports MAC address binding with port
8. Device Management: supports FTP upgrade
9. Device Maintenance: supports port mirroring
10. Alarm Output: supports power, port alarms
11. Special Function: supports Link Check and Loop Status Check

### Technical Specifications

#### Standard

IEEE802.3i, IEEE802.3u, IEEE802.3x, IEEE802.1p, IEEE802.1Q, IEEE802.1d

#### Protocols

DT-Ring, DT-VLAN, STP;  
VLAN, PVLAN;  
IGMP Snooping;  
FTP, HTTP, LLDP, QoS, SNMPv1/v2/v3, Telnet

#### Switch Properties

Priority Queues: 4  
Number of VLANs: 256  
VLAN ID: 1-4094  
Number of Multicast Groups: 256  
Packet Buffer: 2Mbit  
Packet Forwarding Rate: 1.2Mpps  
Switching Delay: < 5μs

#### Interface

Fast Ethernet Ports: 8 10/100Base-TX RJ45 ports (KIEN5000), 6 10/100Base-TX RJ45 ports and 2 100M fiber ports (KIEN6000)  
Console Port: RS232 (RJ45 connector)  
Alarm Contact: 2-pin 3.81mm-spacing plug-in terminal block, 250VAC/350VDC Max, 120mA Max

#### LED

LEDs on Front Panel:  
Running 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 (77-150VDC), 220DC(120-375VDC), 220AC(85-265VAC)  
 Power Terminal: 3-pin 3.81mm-spacing plug-in terminal block  
 Power Consumption: <6.7W  
 Overload Protection: Support  
 Reverse Connection Protection: Support  
 Redundancy Protection: Support

**Physical Characteristics**

Housing: Aluminum, fanless  
 Protection Class: IP40  
 Dimensions (WxHxD): 55.4x139x119.5mm (2.18x5.47x4.70 in.)  
 Weight: 0.6kg (1.323 pound)  
 Mounting: DIN-Rail or Panel mounting

**Environmental Limits**

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

**MTBF**

364,067 hrs

**Warranty**

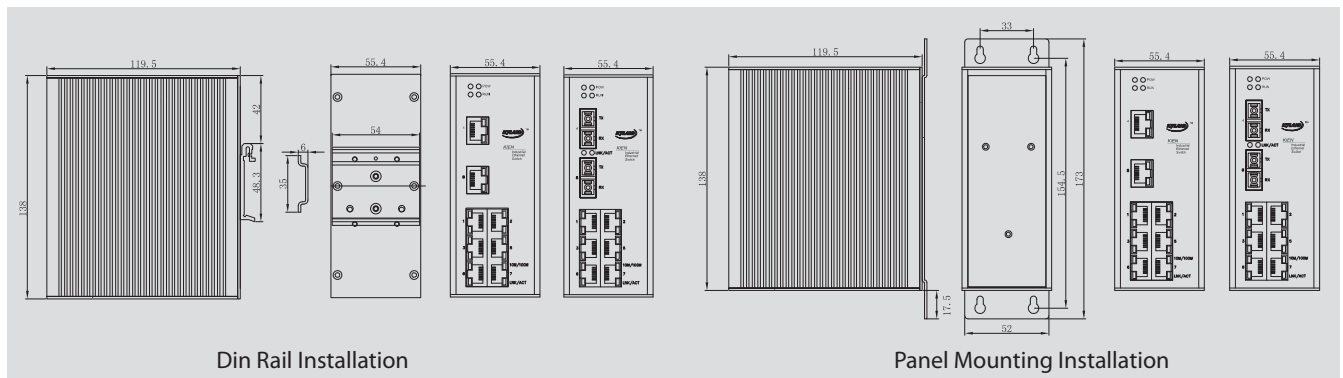
5 years

**Approvals**

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)  
 IEC61000-4-16 (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****Ordering Information**

Model & Ports - Distance - Connector - PS

**Model & Ports**

KIEN5000-8T = 8 10/100Base-TX RJ45 ports  
 KIEN6000-2M-6T = 2 100Base-FX multi mode ports, 6 10/100Base-TX ports  
 KIEN6000-2S-6T = 2 100Base-FX single mode ports, 6 10/100Base-TX ports

**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**

KIEN5000-8T-12VDC  
 8 10/100Base-TX RJ45 ports, 12VDC(9-18VDC) dual redundant power inputs