

# KIEN1005G

## 5G Port Full Gigabit Unmanaged Din-Rail Switch



- Green Ethernet solution with ultra low power consumption design
- As low as 3.4 watts full load power consumption
- 5 10/100/1000Base-TX ports
- Redundant AC/DC power inputs with wide voltage range
- EMC performance reaches industrial level 4
- IP40 protection class
- UL508 , Class 1 Div 2, CE, FCC certificates



### Overview

The KIEN1005G is Kyland new full Gigabit unmanaged industrial Ethernet switch. It is also a new member of ultra low power consumption Green Ethernet series, its full load power consumption is as low as 3.4 watts. The KIEN1005G supports a wide operating temperature range from -40 to 85°C. It provides IP40 protection class and meets EMC industrial level 4 requirements.

The KIEN1005G switch provides 24DCW (18-72VDC) redundant power inputs. This switch is specially designed for harsh industrial environments certified by UL508 and UL Class 1 Div 2 certifications and it is your best option for economical industrial Gigabit Ethernet solution.

### Technical Specifications

#### Standard

IEEE 802.3i  
IEEE 802.3u  
IEEE 802.3ab  
IEEE802.3z

#### Switch Properties

MAC Table: 1K  
Packet Buffer: 1Mbit  
Packet Forwarding Rate: 7.4Mpps  
Switching Delay: <5µs

#### Interface

Gigabit Ethernet Ports: 5 10/100/1000Base-TX RJ45 ports

#### LED

LEDs on Front Panel:  
Power LED: PWR1, PWR2  
Interface LED: Link/ACT, Speed (RJ45 port)

#### Transmission Distance

Twisted Pair: 100m (Standard CAT5, CAT5e network cable)

#### Power Requirements

Power Input:  
24DCW (18-72VDC)  
Power Terminal:  
5-pin 5.08mm-spacing plug-in terminal block  
Power Consumption: 3.4W (full load)

Overload Protection: Support  
Reverse Connection Protection: Support  
Redundancy Protection: Support

#### Physical Characteristics

Housing: Metal, fanless  
Protection Class: IP40  
Dimensions (WxHxD):  
30x115x91.5 mm (1.18x4.53x3.60 in.)  
Weight: 0.76kg (1.676 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**

357,000 hrs

**Warranty**

5 years

**Approvals**

UL508 Class 1 Div 2 CE, FCC

**Industrial Standard**

EMI:  
 FCC CFR47 Part 15, EN55022/CISPR22, Class A

**EMS:**

IEC61000-4-2 (ESD):  $\pm 8$ kV (contact),  $\pm 15$ kV (air)  
 IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)  
 IEC61000-4-4 (EFT): Power Port:  $\pm 4$ kV; Data Port:  $\pm 2$ kV  
 IEC61000-4-5 (Surge): Power Port:  $\pm 2$ kV/DM,  $\pm 4$ kV/CM; Data Port:  $\pm 2$ kV  
 IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)  
 IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

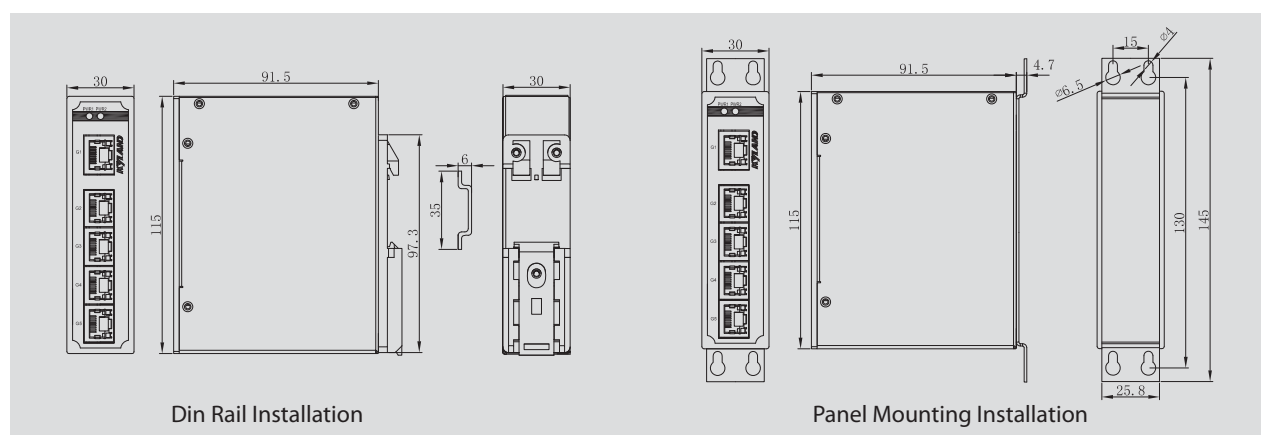
**Machinery:**

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

KIEN1005G - \_\_\_\_\_ - \_\_\_\_\_  
 Ports PS

**Ports**

5GE = 5 10/100/1000Base-TX RJ45 ports

**PS: Power Supply**

24DCW = 18-72VDC, dual redundant power inputs

**Example Order Codes**

KIEN1005G-5GE-24DCW  
 5 10/100/1000Base-TX RJ45 ports, 18-72VDC, dual redundant power inputs