

# Opal8GL

## 8G port full gigabit unmanaged DIN-Rail switches



### » Overview

Opal8GL unmanaged 8-port switch is characterized by its full Gigabit interface, compact size, economical and plug-and-play design, generally used to connect the high bandwidth Ethernet in factory automation, petrochemical, ITS, and other applications. Opal8GL supports 8 10/100/1000Base-TX RJ45 ports, redundant power inputs, built-in isolated power supply, metal housing with IP30/IP40 protection class, thus ensuring fast and reliable data transmission in harsh industrial environments. Opal8GL provides both standard (-10°C to 60°C) and wide (-40°C to 75°C) operating temperature range models to meet different applications.

### » Key Features

Support 8 10/100/1000Base-T(X) ports

Built-in isolated power supply, Full load power consumption is as low as 5 W

Both standard and wide operating temperature models are available

Jumbo frame transmission function (up to 9KB)

EMC level 3

IP30/IP40 protection class

## » Product Specifications

### > Technical Specification

#### -Standard

IEEE 802.3i (10Base-T)

IEEE 802.3u (100Base-TX )

IEEE 802.3ab (1000Base-T)

IEEE 802.3x (Flow Control)

#### -Switch Properties

MAC Table: 4K

Packet Buffer: 1.5Mbit

Packet Forwarding Rate: 11.9Mpps

Switching Delay: <5 $\mu$ s

Jumbo Frame Size: 9KB

#### -Interface

Gigabit Port:

10/100/1000Base-T(X), RJ45 port

#### -LED

LEDs on Front Panel

Power LED: PWR1, PWR2

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

#### -Power Requirements

Power Input: 12-48VDC/18-30VAC

Power Terminal: 4-pin 5.08mm-spacing plug-in terminal block

Power Consumption: 5W

Overload Protection: Support

Reverse Protection: Support

Redundancy Protection: Support

#### -Physical Characteristics

Housing: Metal

Cooling: Natural convection, fanless

Protection Class: IP40(Opal8GL), IP30(Opal8GL-W)

Dimension: 31mm×147mm×94mm(Opal8GL), 45.6mm×100.5mm×101mm(Opal8GL-W) (W×H×D)

Weight: 0.4Kg(Opal8G), 0.3Kg(Opal8G-W)

Mounting: DIN-Rail or Panel Mounting

#### **-Environmental Limits**

Operating Temperature:

-10°C to +60°C (-E)

-40°C to +75°C

Storage Temperature: -40°C to +85°C

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

#### **-Quality Assurance**

MTBF: 7862765 hrs(Opal8G), 6856926 hrs (Opal8G-W)

Warranty: 5 years

#### **-Approvals**

CE, FCC

UL61010, Class I Div 2

#### **-Industry Standard**

EMI:

FCC CFR47 Part 15,EN55032/CISPR22,Class A

EMS:

IEC61000-4-2(ESD): ±6kV (contact), ±8kV (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: ±1kV/DM, ±2kV/CM; Data Port: ±2kV

IEC61000-4-6(CS): 10V (150kHz–80MHz)

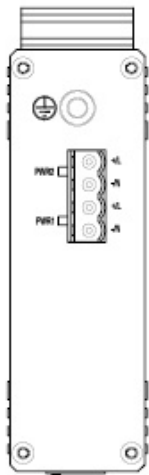
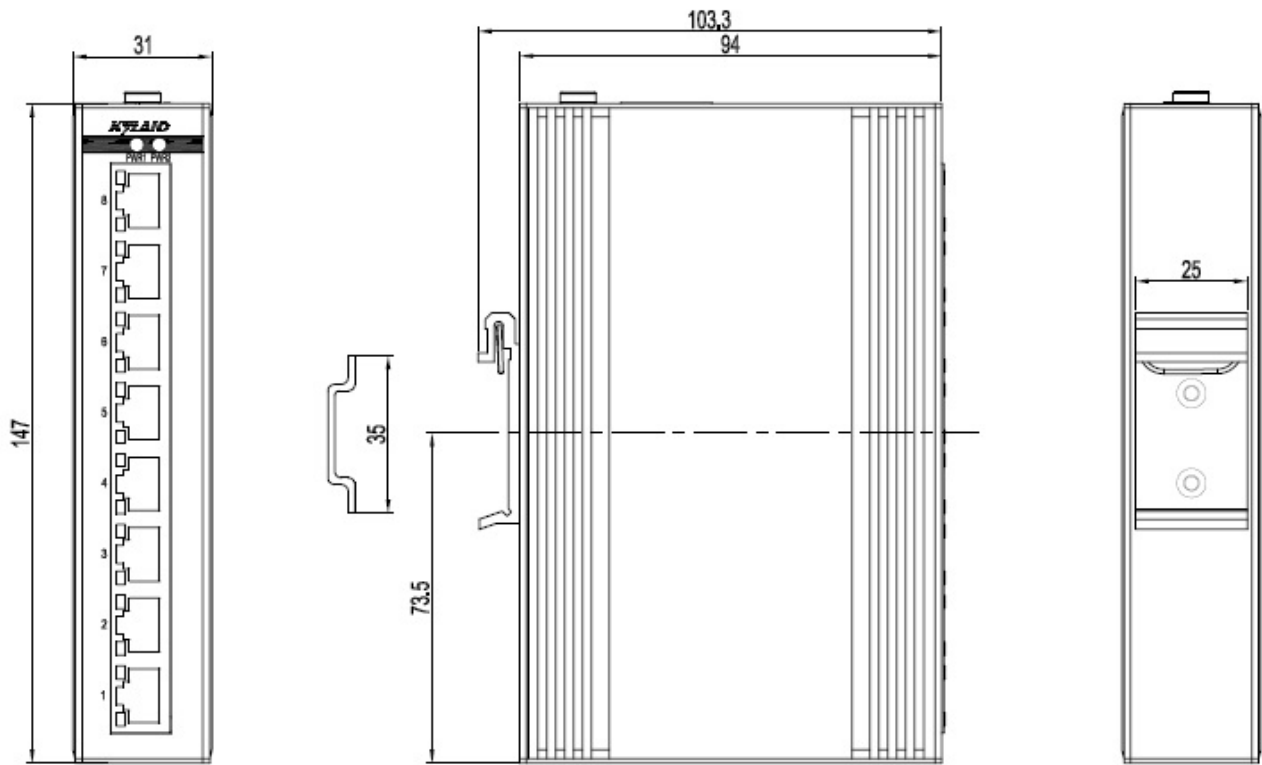
Machinery:

IEC60068-2-6 (Vibration)

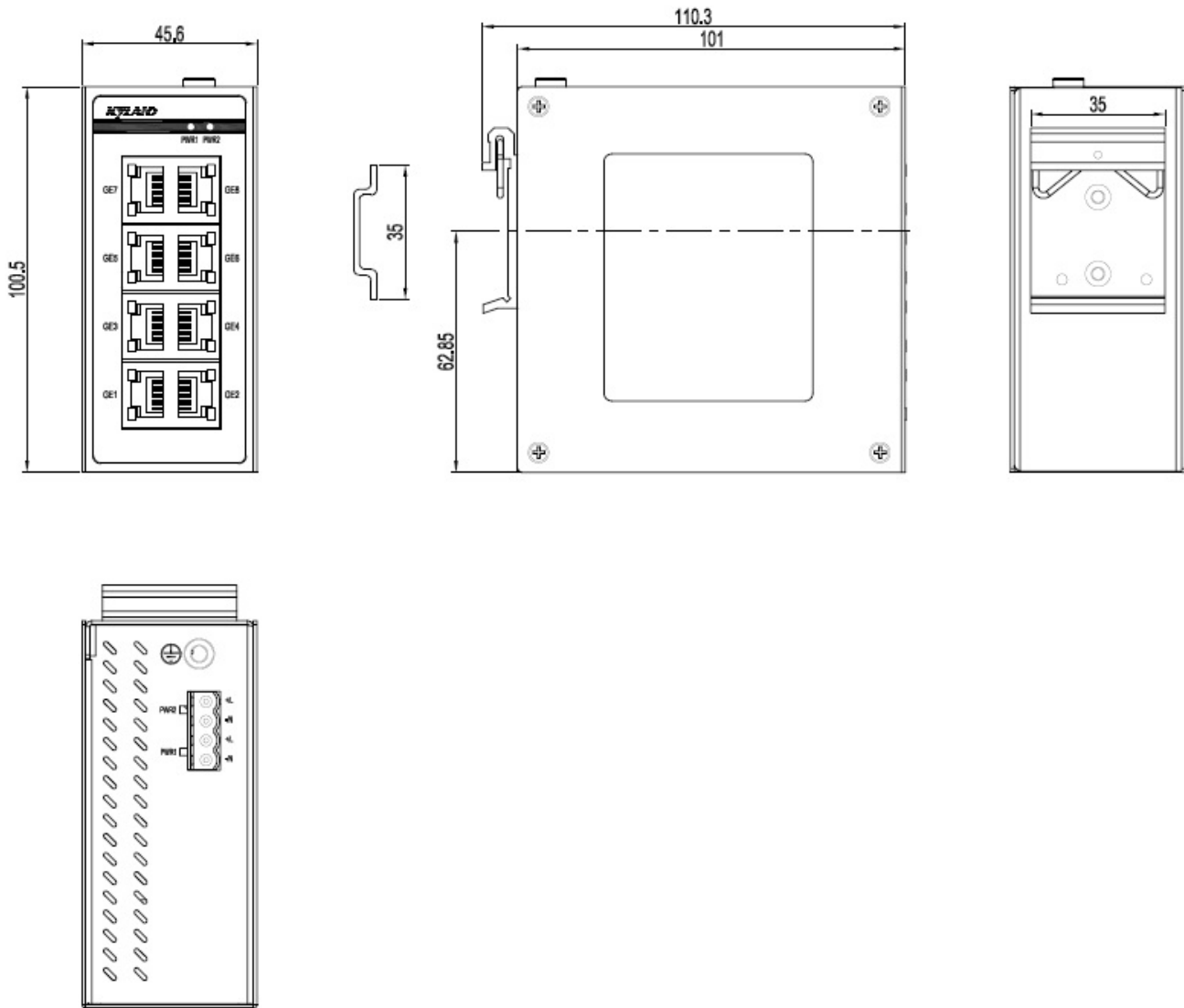
IEC60068-2-27 (Shock)

IEC60068-2-32 (Free Fall)

Opal8GL:



Opal8GL-W:



» Ordering Information

Opal8GL-X1-Ports-PS1-PS2-X2	
<b>X1</b>	<b>Operating temperature range</b>
E	-10 to +60°C operating temperature
None	-40 to +75°C operating temperature
<b>Ports</b>	
8GE	8 X 10/100/1000Base-T(X) RJ45 ports
<b>PS1-PS2</b>	
LV-LV	12-48VDC/18-30VAC, redundant power inputs
<b>X2</b>	
None	31mm×147mm×94mm (W×H×D)
W	45.6mm×100.5mm×101mm (W×H×D)
<b>Accessories</b>	
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port

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