

# Opal10GL

## 10G port full gigabit unmanaged DIN-Rail switches



### » Overview

Opal10GL unmanaged 10-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. Opal10GL supports 2 Gigabit SFP ports and up to 8 10/100/1000Base-TX RJ45 ports, redundant power inputs, built-in isolated power supply, metal housing with IP40 protection class, thus ensuring fast and reliable data transmission in harsh industrial environments. Opal10GL 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 2 Gigabit SFP ports, 8 10/100/1000Base-T(X) ports
- Built-in isolated power supply, Full load power consumption is as low as 6.9 W
- Both standard and wide operating temperature models are available
- Jumbo frame transmission function (up to 9KB)
- EMC level 3
- IP40 protection class

## **» Product Specifications**

### **>Technical Specification**

#### **-Standard**

IEEE 802.3i (10Base-T)

IEEE 802.3u (100Base-TX)

IEEE 802.3ab (1000Base-T)

IEEE 802.3z (1000Base-X)

IEEE 802.3x (Flow Control)

#### **-Switch Properties**

MAC Table: 4K

Packet Buffer: 1.5Mbit

Packet Forwarding Rate: 14.9Mpps

Switching Delay:<5 $\mu$ s

Jumbo Frame Size: 9KB

#### **-Interface**

Gigabit Port:

1000Base-X, SFP slot

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

#### **-LED**

LEDs on Front Panel

Power LED: PWR1, PWR2

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

#### **-Power Requirements**

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

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

Power Consumption: 6.9W(2GX8GE), 5.8W(2SFP8GE), 4.8W(8GE)

Overload Protection: Support

Reverse Protection: Support

Redundancy Protection: Support

#### **-Physical Characteristics**

Housing: Metal

Cooling: Natural convection, fanless

Protection Class: IP40

Dimension: 53.6mm×135mm×108mm (W×H×D)

Weight: 0.5Kg

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: 6363643 hrs

Warranty: 5 years

#### **-Approvals**

CE, FCC

UL61010, Class I Div 2 (Pending)

#### **-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)

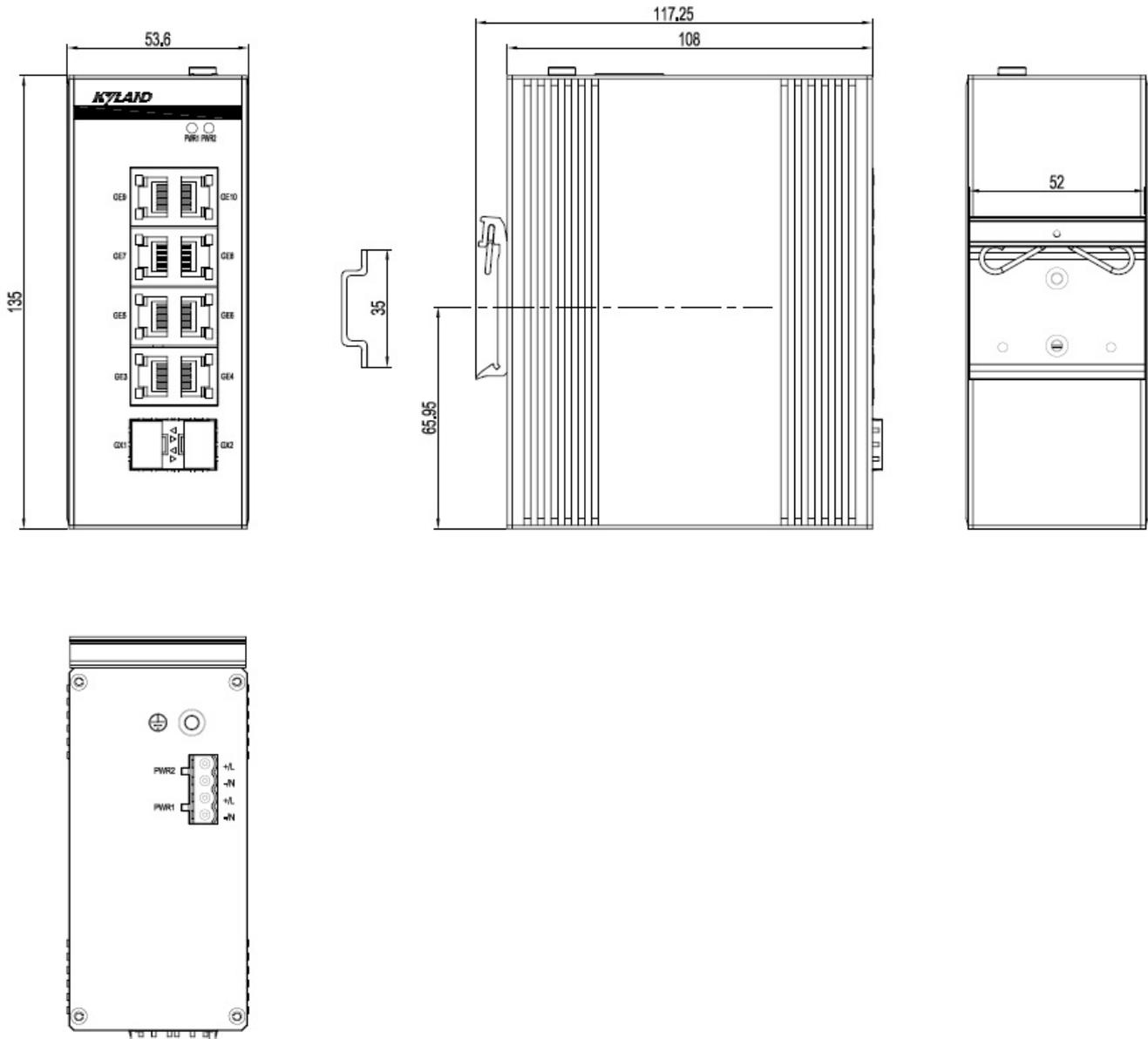
Machinery:

IEC60068-2-6 (Vibration)

IEC60068-2-27 (Shock)

IEC60068-2-32 (Free Fall)

» Mechanical Drawing



» Ordering Information

Opal10GL-X-Ports-PS1-PS2	
X	<b>Operating temperature range</b>
E	-10 to +60°C operating temperature
None	-40 to +75°C operating temperature
<b>Ports</b>	
2GX8GE	2 X 1000Base-X SFP slots, 8 X 10/100/1000Base-T(X) RJ45 ports
2SFP8GE	2 X 100Base-X SFP slots, 8 X 10/100/1000Base-T(X) RJ45 ports
8GE	8 X 10/100/1000Base-T(X) RJ45 ports
<b>PS1-PS2</b>	

LV-LV	12-48VDC/18-30VAC, redundant power inputs
<b>Accessories</b>	
Gigabit SFP module	Please refer to the Gigabit SFP module ordering list
100Base-X SFP module	Please refer to the 100Base-X SFP module ordering list
DT-BGAZ-02	Panel for Panel mounting
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port

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