

# Opal5GS

## 5G port unmanaged DIN-Rail PoE switches



### » Overview

Opal5GS series are unmanaged 5-port PoE switches, providing 1 Gigabit SFP/Copper port and 4 10/100/1000Base-TX PoE ports compliant with IEEE802.3at/af. While transmitting data over the cable, each PoE port can output 30 watts to PoE terminals directly, eliminating the need for additional wiring. Opal5GS supports wide operating temperature range from -40°C to 75°C, metal housing with IP30 protection class and redundant power inputs, becoming an economical and harsh-environment-resistant solution for the ITS, video surveillance and other automation applications.

### » Key Features

1 Gigabit SFP/Copper port and 4 10/100/1000Base-TX PoE ports compliant with IEEE802.3at/af

Support PD detection and PD classification

Operating temperature is -40°C to 75°C

IP30 protection class

CE, FCC, UL61010

### » Product Specifications

#### > Technical Specification

##### -Standard

IEEE 802.3i, IEEE 802.3u, IEEE 802.3af, IEEE 802.3at

##### -Switch Properties

MAC Table 8K

Packet Buffer 1Mbit

Packet Forwarding Rate 7.44Mpps

Switching Delay <10 $\mu$ s

Jumbo Frame 10KByte

### **-Interface**

Port 1000Base-X SFP port

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

802.3af/at PoE Port Each PoE port provides max 30W feed power

V+ for pin 1, 2 and V- for pin 3,6(End-Span PSE)

Ethernet port support half duplex and full duplex

### **-DIP Switches**

DIP Switches I:

ON: Enable broadcast storm protection

OFF: Disable broadcast storm protection

DIP Switches II:

ON: Enable Jumbo Frame transpond

OFF: Disable Jumbo Frame transpond

### **-LED**

LEDs on Front Panel

Power LED:PWR1,PWR2

Interface LED:Link/ACT,Speed(Copper port);Link/ACT(SFP port)

PoE Status LED: POE(2-5)

### **-Power Requirements**

Power Input

L5: 24VDC(12-36VDC)

L16: 48VDC(12-57VDC)

12-45VDC for no PoE

45-57VDC for PoE

51-57VDC for PoE+

Power Consumption

L5:

<4.5W(Non PD)

PoE output 60W@12VDC

PoE output 120W@24VDC

L16:

<4.5W@12-45VDC(Non PD)

PoE output 60W@45-57VDC(PoE)

PoE output 120W@51-57VDC(PoE+)

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

PoE overload protection Support

Reverse protection Support

Redundancy protection Support

**-Physical Characteristics**

Housing Metal

Cooling Natural convection, fanless

Protection Class IP30

Dimension 30mm×136mm×106mm(W×H×D)

Weight <0.5Kg

Mounting DIN-Rail Mounting

**-Environmental Limits**

Operating Temperature -40°C ~ +75°C

Storage Temperature -40°C ~ +85°C

Ambient Relative Humidity 5 ~ 95% (non-condensing)

**-Warranty**

MTBF 2638080h

Warranty 5 years

**-Approvals**

CE, FCC

EMC: EN 55032, EN 61000-6-4, EN 61000-6-2

Rail Traffic: EN 50121

UL61010

**-Industrial Standards**

EMI

FCC CFR47 Part 15,EN55032/CISPR22,Class A

EMS

IEC61000-4-2(ESD)  $\pm 6\text{kV}$ (contact), $\pm 8\text{kV}$ (air)

IEC61000-4-3(RS) 10V/m(80MHz ~ 2GHz)

IEC61000-4-4(EFT) Power Port: $\pm 2\text{kV}$ ;Data Port: $\pm 1\text{kV}$

IEC61000-4-5(Surge) Power Port: $\pm 1\text{kV/DM}$ , $\pm 2\text{kV/CM}$ ;Data Port: $\pm 2\text{kV}$

IEC61000-4-6(CS) 10V(150kHz ~ 80MHz)

Machinery

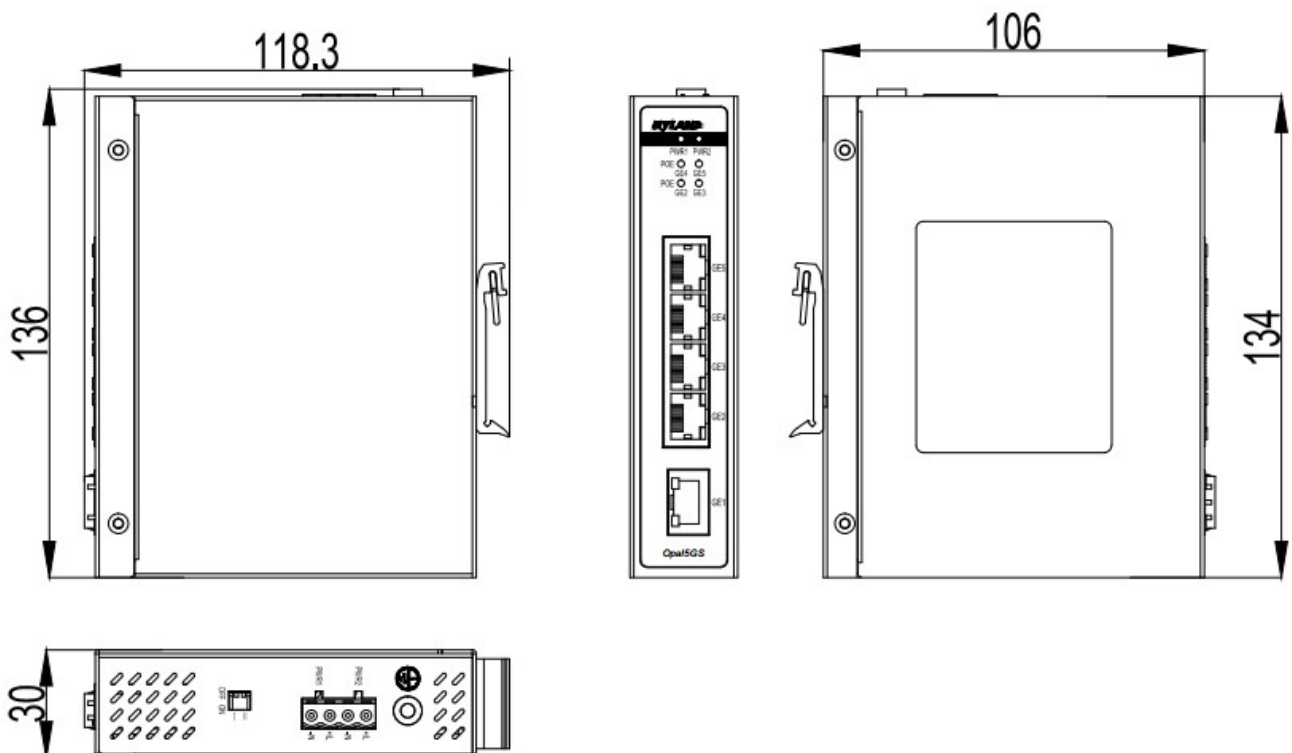
IEC60068-2-6 (Shock)

IEC60068-2-27 (Vibration)

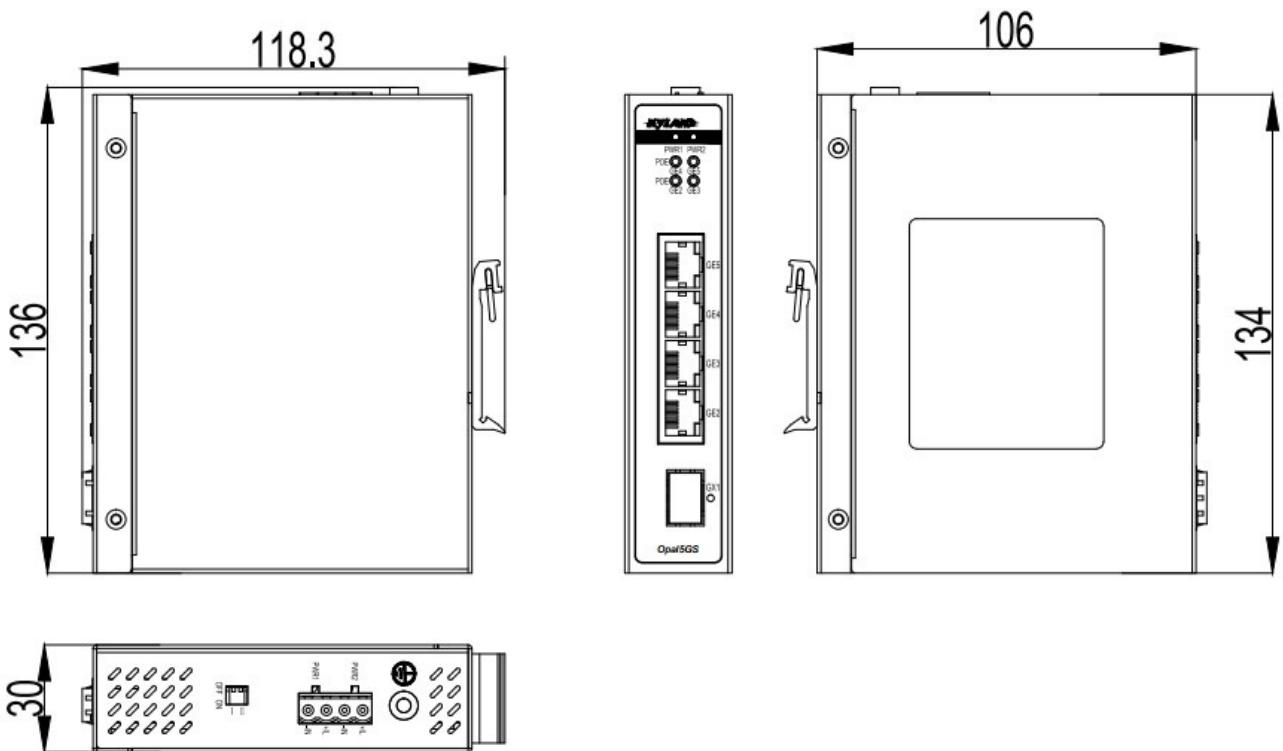
IEC60068-2-32 (Free Fall)

**» Mechanical Drawing**

Opal5GS-1GE4GP:



Opal5GS-1GX4GP:



» Ordering Information

Ordering Information

Product Models	Opal5GS-Ports-PS1-PS2
Code Definition	Ordering Code
Ports	1GX4GP=1×1000Base-X, SFP port; 4x10/100/1000Base-T(X) PoE ports 1GE4GP=1x10/100/1000Base-T(X) port; 4x10/100/1000Base-T(X) PoE ports
PS1-PS2: (Redundant Power Inputs)	L5-L5=12-36VDC, redundant power inputs L16-L16=12-57VDC, redundant power inputs

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