

# Opal5L

## 5 port unmanaged DIN-Rail switches



### » Overview

Opal5L unmanaged 5-port switch is specially designed for automation control applications. It is equipped with one fast Ethernet fiber/RJ45 optional port and 4 10/100Base-TX RJ45 ports. Opal5L supports SFP type fiber 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. Opal5L 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 1 Fast Ethernet fiber/RJ45 optional port, 4 10/100Base-T(X) ports

Built-in isolated power supply, Full load power consumption is as low as 2.5 W

Both standard and wide operating temperature models are available

EMC level 3

IP30/IP40 protection class

### » Product Specifications

#### > Technical Specification

**-Standard**

IEEE 802.3i (10Base-T)

IEEE 802.3u (100Base-TX and 100Base-FX)

IEEE 802.3x (Flow Control)

**-Switch Properties**

MAC Table: 2K

Packet Buffer: 1Mbit

Packet Forwarding Rate: 0.75Mpps

Switching Delay: <10 $\mu$ s

**-Interface**

Fast Ethernet Port:

100Base-X, SFP slot

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

**-LED**

LEDs on Front Panel

Power LED: PWR1, PWR2

Interface LED: Link/ACT (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: 2.0W(5T), 2.4W(1SFP4T)

Overload Protection: Support

Reverse Protection: Support

Redundancy Protection: Support

**-Physical Characteristics**

Housing: Metal

Cooling: Natural convection, fanless

Protection Class: IP30(5T), IP40(1SFP4T)

Dimension: 29.6mm×114.5mm×68mm(5T), 31mm×114.5mm×94mm(1SFP4T) (W×H×D)

Weight: 0.2Kg(5T), 0.3Kg (1SFP4T)

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: 5777888 hrs (5T), 8502760 hrs (1SFP4T)

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:

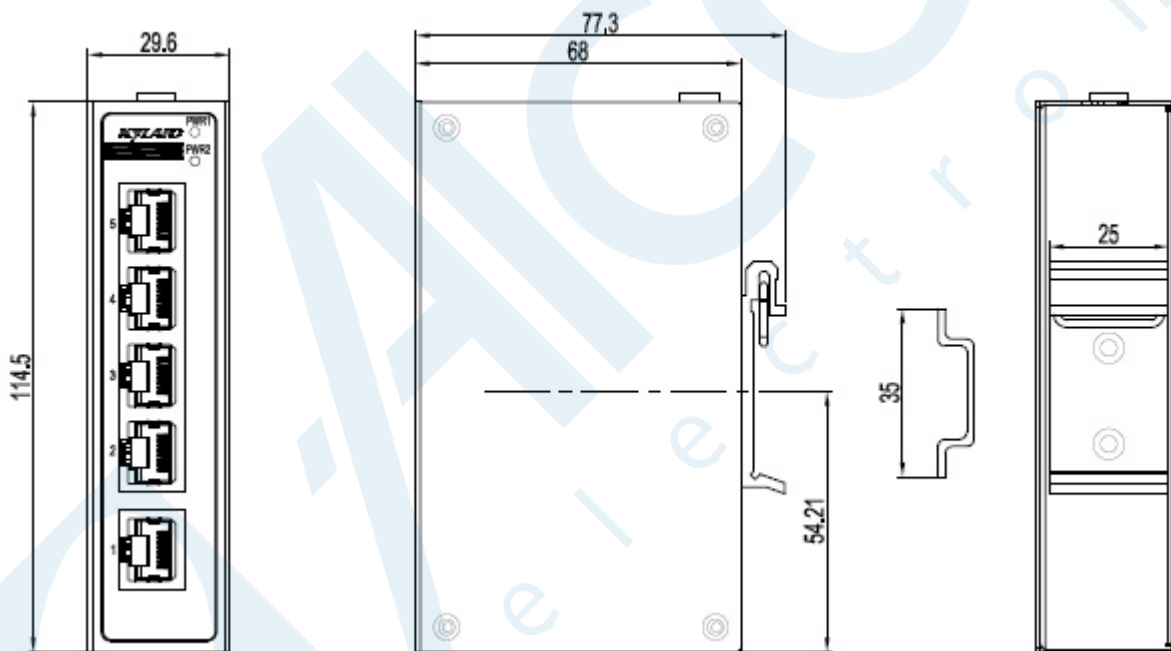
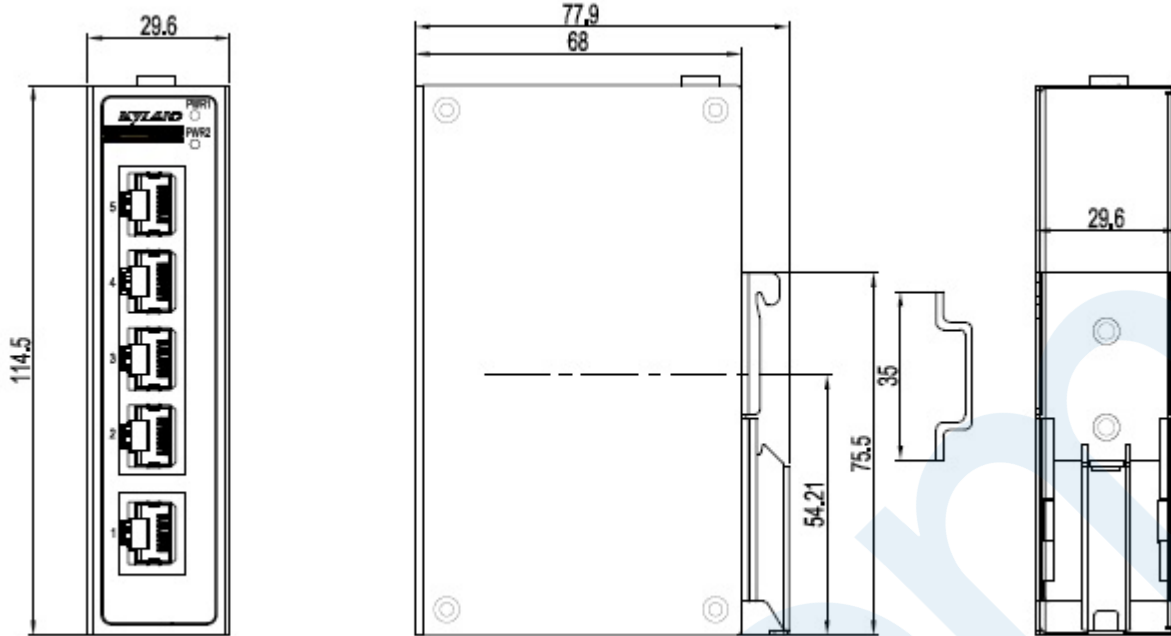
IEC60068-2-6 (Vibration)

IEC60068-2-27 (Shock)

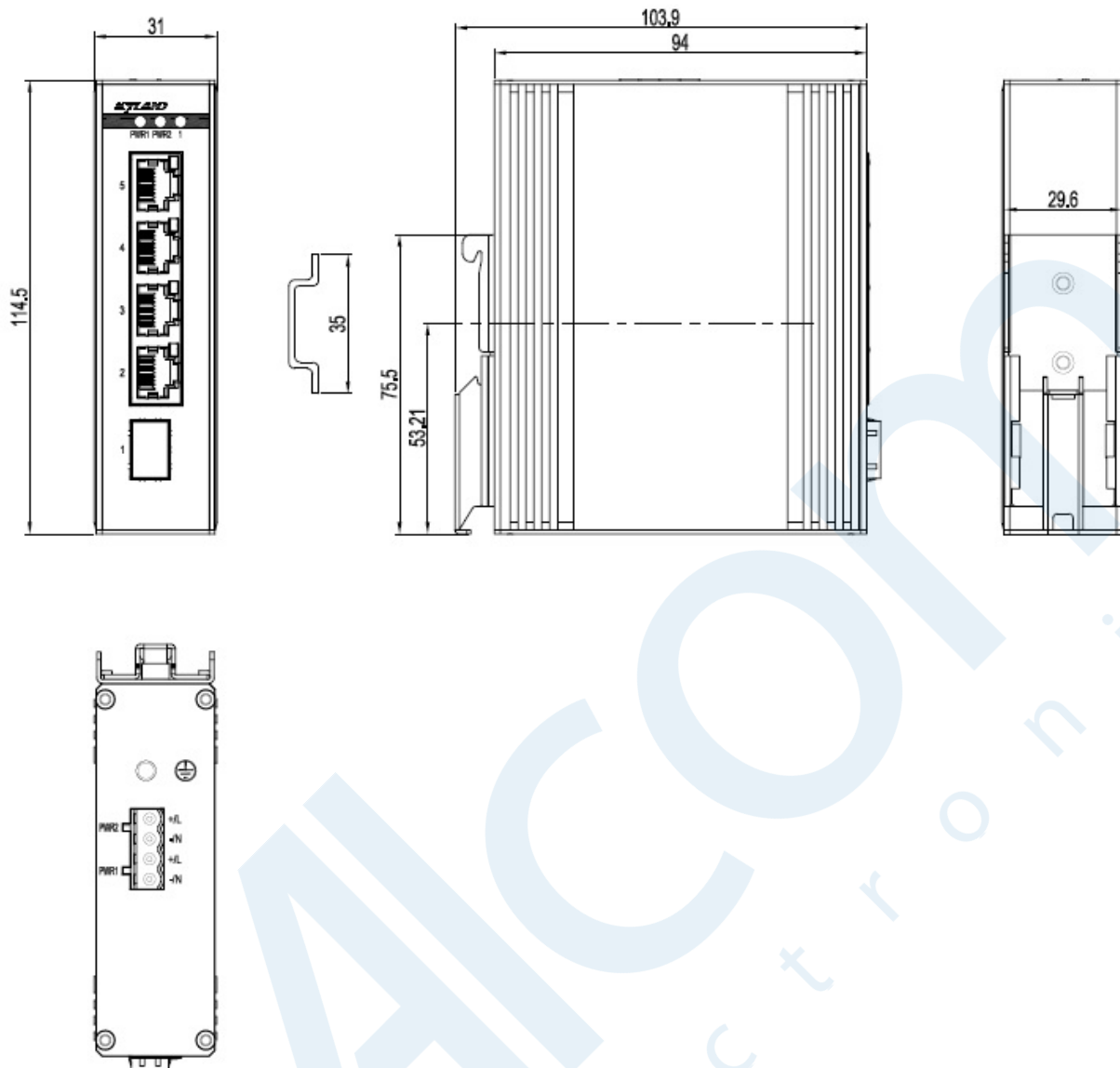
IEC60068-2-32 (Free Fall)

**» Mechanical Drawing**

Opal5L-5T:



Opal5L-1SFP4T:



## » Ordering Information

Opal5L-X-Ports-PS1-PS2	
<b>X</b>	<b>Operating temperature range</b>
E	-10 to +60°C operating temperature
None	-40 to +75°C operating temperature
<b>Ports</b>	
5T	5 X 10/100Base-T(X) RJ45 ports
1SFP4T	1 X 100Base-X, SFP slot; 4 X 10/100Base-T(X) RJ45 ports
<b>PS1-PS2</b>	
LV-LV	12-48VDC/18-30VAC, redundant power inputs
<b>Accessories</b>	
100Base-X SFP module	Please refer to the 100Base-X SFP module ordering list
DT-BGAZ-01	Panel for Panel mounting
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port

