

# Opal5

5 port entry-level unmanaged DIN-Rail switches



## Overview

Opal5 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. Opal5 supports SC/ST/SFP type fiber ports, redundant power inputs, metal housing with IP30 protection class, thus ensuring fast and reliable data transmission in harsh industrial environments. Opal5 provides both standard (-10°C to 60°C) operating temperature range model and wide (-40°C to 75°C) operating temperature range models to meet different applications.

## Key Features

1 Fast Ethernet fiber/RJ45 optional port, 4 10/100Base-T(X) ports Both standard and wide operating temperature models are available IP30 protection class

CE, FCC, UL61010, Class I Div 2, IECEx, ATEX Zone 2, Ex nA IIC T4 Gc

## Product Specifications

>Technical Specification

-Standard

IEEE 802.3i (10Base-T)

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

-Switch Properties MAC

Table: 2K Packet Buffer:

1Mbit

Packet Forwarding Rate: 0.75Mpps

Switching Delay: <10 $\mu$ s

-Interface

Fast Ethernet Port:

100Base-FX, SM/MM, SC/ST connector

100Base-X, SFP slot

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

-LED

LEDs on Front Panel Power

LED: PWR1, PWR2

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

-DIP-Switch

Enable/Disable broadcast storm protection

-Power Requirements

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

Terminal:

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

Consumption: <3.4w

Overload Protection: Support Reverse

Protection: Support Redundancy

Protection: Support

Communication ports isolation: 500 Vdc, 1 minute

-Physical Characteristics

Housing: Metal

Cooling: Natural convection, fanless

Protection Class: IP30

Dimension: 30mm×115mm×68mm (W×H×D) Weight:

0.2Kg

Mounting: DIN-Rail or Panel Mounting

-Environmental Limits

Operating Temperature:

-10°C to +60°C (Opal5-E)

-40°C to +75°C

Storage Temperature: -40°C to +85°C

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

: 2000M

-Quality Assurance

MTBF: 5832000 hrs

Warranty: 5 years

-Approvals

CE, FCC, UL61010, Class I Div 2, IECEx, ATEX Zone 2, Ex nA IIC T4 Gc

-Industry Standard EMI:

FCC CFR47 Part 15, EN55022/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: ±2kV; Data Port: ±1kV

IEC61000-4-5(Surge): Power Port: ±1kV/DM, ±2kV/CM; Data Port: ±1kV IEC61000-4-

6(CS): 10V (150kHz–80MHz)

Machinery:

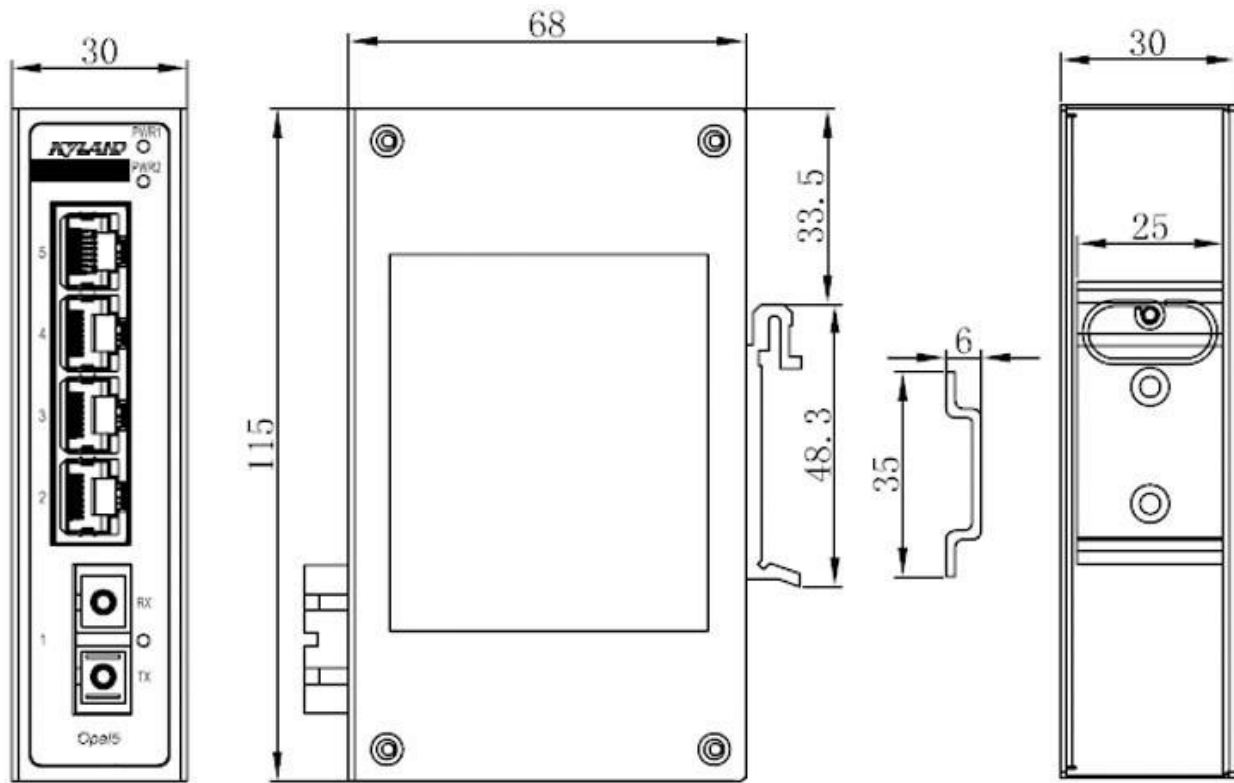
IEC60068-2-6 (Vibration)

IEC60068-2-27 (Shock)

IEC60068-2-32 (Free Fall)



Mechanical Drawing



Ordering Information

Opal5-X-Ports-Connector-PS

X	Operating temperature range
E	-10 to +60°C operating temperature
None	-40 to +75°C operating temperature
5T	Ports 5 10/100Base-T(X) RJ45 ports
1S4T	1x100Base-FX, single mode fiber port; 4x10/100Base-T(X) RJ45 ports
1M4T	1x100Base-FX, multi mode fiber port; 4x10/100Base-T(X) RJ45 ports
1SFP4T	1 100Base-X, SFP slot; 4 10/100Base-T(X) RJ45 ports
Connector	100M fiber port specifications
SC05	SC connector, multi-mode, 1310nm, 5km
ST05	ST connector, multi-mode, 1310nm, 5km
SC40	SC connector, single-mode, 1310nm, 40km
ST40	ST connector, single-mode, 1310nm, 40km
SC60	SC connector, single-mode, 1310nm, 60km
SC80	SC connector, single-mode, 1550nm, 80km
None	No 100M fiber port
PS	
LV-LV	12-48VDC/18-30VAC, redundant power inputs

Accessories

100Base-X SFP module	Please refer to the 100Base-X SFP module ordering list
DT-BGAZ-13	Panel for Panel mounting
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port

