Opal8

8 Port Entry-level Unmanaged DIN-Rail Switches

NEW

- 2 Fast Ethernet fiber/RJ45 optional ports, 6 10/100Base-T(X) ports
- Both standard and wide operating temperature models are available
- IP30 protection class
- UL508, Class I Div 2, ATEX Zone 2, IECEx, CE, FCC

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Overview

Opal8 unmanaged 8-port switch is specially designed for automation control applications. It is equipped with two fast Ethernet fiber/RJ45 optional ports and 6 10/100Base-TX RJ45 ports. Opal8 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. Opal8 provides both standard (-10 to 60°C) operating temperature range model and wide (-40 to 75°C) operating temperature range models to meet different needs of applications.

Technical Specification

Technical Parameters

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	1.2Mpps
Switching Delay	<10μs

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	<4.6W
Overload Protection	Support
Reverse Protection	Support
Redundancy Protection	Support

Physical Characteristics

Housing	Metal
Cooling	Natural convection, fanless
Protection Class	IP30
Dimension	46mm×115mm×68mm(W×H×D)
Weight	0.32Kg
Mounting	DIN-Rail or Panel Mounting

Environmental Limits

Operating Temperature
▼ -10°C to +60°C (Opal8-E)
▼ -40°C to +75°C

Storage Temperature	-40°C to +85°C
Ambient Relative Humidity	5-95% (non-condensing)

Approvals

MTBF   4,044,813 hrs
Warranty   5 years

Certificates

UL508,Class I Div 2, ATEX Zone 2, IECEx, CE, FCC
 (The certificate status for 1SFP7T and 2SFP6T models are pending.)

Industrial 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

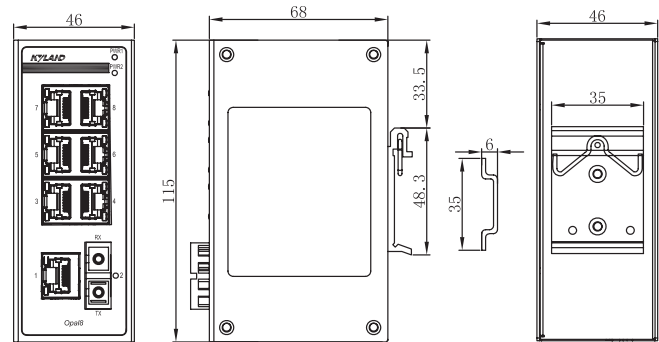|	
Opal8-Ports-Connector-PS1-PS2	
Opal9-E-Ports-Connector-PS1-PS2	
Operating temperature range	
E	-10℃-+60℃ operating temperature
None	-40℃-+75℃ operating temperature
Ports	
8T	8×10/100Base-T(X) RJ45 ports
1S7T	1×100Base-FX, single mode fiber port; 7×10/100Base-T(X) RJ45 ports
1M7T	1×100Base-FX, multi mode fiber port; 7×10/100Base-T(X) RJ45 ports
1SFP7T	1×100Base-X, SFP slot; 7×10/100Base-T(X) RJ45 ports
2S6T	2×100Base-FX, single mode fiber ports; 6×10/100Base-T(X) RJ45 ports
2M6T	2×100Base-FX, multi mode fiber ports; 6×10/100Base-T(X) RJ45 ports
2SFP6T	2×100Base-X, SFP slots; 6×10/100Base-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

Model	Description
100Base-X SFP module	Please refer to the 100Base-X SFP module ordering list
DT-BGAZ-10	Panel for Panel mounting
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port