

Opal5G

5G port entry-level full gigabit unmanaged DIN-Rail switches



» Overview

Opal5G series, Kyland produced 5-port unmanaged switches, are 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. Opal5G support 5 10/100/1000Base-TX RJ45 ports, along with metal housing with IP30 protection class, thus ensuring fast and reliable data transmission in harsh industrial environments. The two DIP-switches located on the top of the device are used to enable/disable Broadcast Storm Protection (BSP) function and Jumbo frame transmission function, respectively. Opal5G provide 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 5 10/100/1000Base-TX RJ45 ports

Setting jumbo frame transmission function (up to 10KB) by DIP-Switch

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)

IEEE 802.3ab(1000Base-T)

-Switch Properties

MAC Table: 8K

Packet Buffer: 1Mbit

Packet Forwarding Rate: 7.4 Mpps

Switching Delay: <5μs

Jumbo Frame Size: 10KB

-Interface

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

-LED

LEDs on Front Panel

Power LED: PWR1, PWR

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

-DIP-Switch

Enable/Disable broadcast storm protection function

Enable/Disable Jumbo frame transmission function (up to 10KB)

-Power Requirements

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

Power Terminal:

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

Power Consumption: <6w

Overload Protection: Support

Reverse Protection: Support

Redundancy Protection: Support

-Physical Characteristics

Housing: Metal

Cooling: Natural convection, fanless

Protection Class: IP30

Dimension: 30mm×115mm×68mm (W×H×D)

Weight: 0.3Kg

Mounting: DIN-Rail or Panel mounting

-Environmental Limits

Operating Temperature:

-10°C to +60°C(Opal5G-E)

-40°C to +75°C

Storage Temperature: -40°C to +85°C

Ambient Relative Humidity: 5°C 95% (non-condensing)

-Quality Assurance

MTBF: 3,300,013 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: ±2kV

IEC61000-4-6(CS): 10V (150kHz–80MHz)

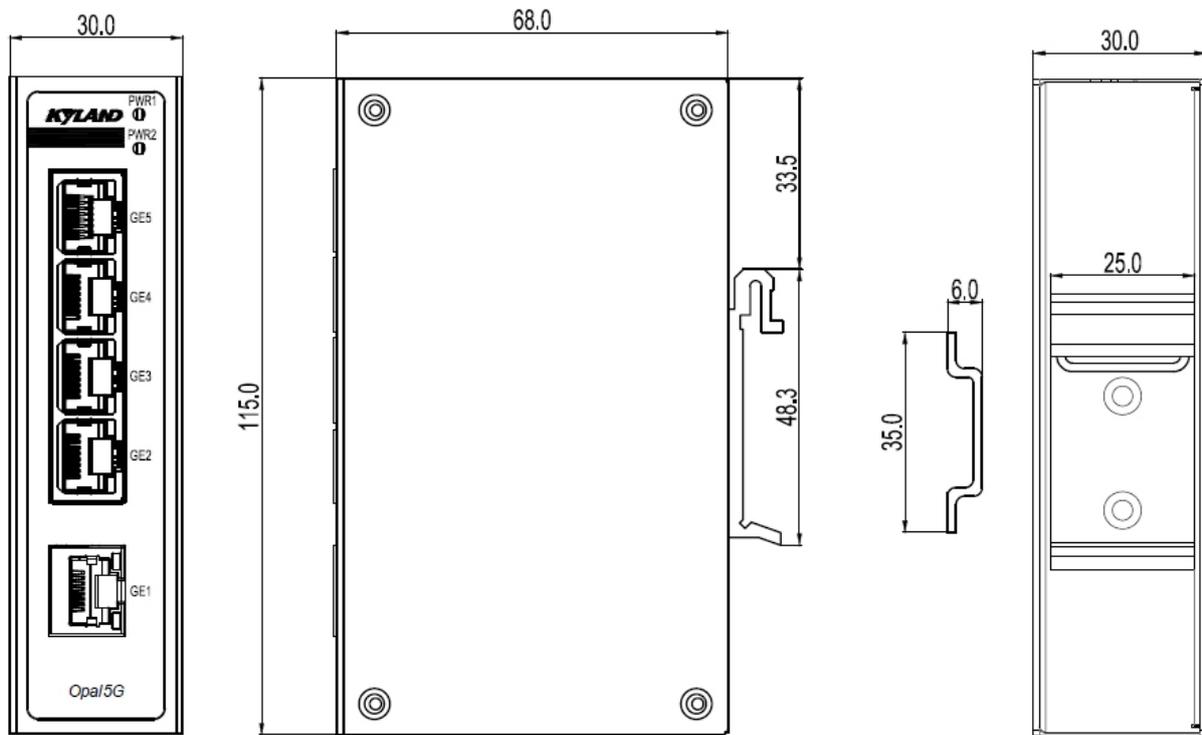
Machinery:

IEC60068-2-6 (Vibration)

IEC60068-2-27 (Shock)

IEC60068-2-32 (Free Fall)

» Mechanical Drawing



» Ordering Information

Opal5G-X-Ports-PS

X	Operating temperature range
E	-10 to +60°C operating temperature
None	-40 to +75°C operating temperature
Ports	
5GE	5X10/100/1000Base-T(X) RJ45 ports
PS	
LV-LV	12-48VDC/18-30VAC, redundant power inputs

Accessories

DT-BGAZ-01	Panel for Panel mounting
DT-FCZ-RJ45-01	Dustproof cover for RJ45 port

Version:2021-03-22 16:47:17