

# OPT-IES2028 Series Industrial Ethernet Switch

8\*10/100/1000Base-Tx to 2\*GE SFP RoHS Compliant







## >>Description

OPT-IES2028 series are equipped with 8 Gigabit Ethernet ports and up to 2 fiber optic ports, making them ideal for applications that demand high bandwidth. OPT-IES2028 series are one of Optone new ultra low power consumption Green Ethernet solutions. Its full load power consumption is 13W which enables not only power electricity saving, but also a longer life span for the devices. OPT-IES2028 full Gigabit unmanaged switches are powered with 12~48VDC power supply, and its operation temperature ranges from -40 to 85°C (-40 to 185°F). They are specially designed for harsh industrial environments and their EMC performance reaches industrial level 4. OPT-IES2028 series can be installed easily on a DIN-Rail or panel mounting distribution boxes.

## >>Main Features

- Green Ethernet solution with ultra low power consumption design
- Both standard and wide operating temperature
- Complies with IEEE 802.3, IEEE 802.3u, IEEE802.3z, IEEE802.3ab, IEEE 802.3z autonegotiation
- Extends distances ranging from 550m (multi-mode fiber) to 120km (single mode fiber)
- Supports auto MDI/MDIX function
- Supports DIN-Rail and hang wall mounting
- Status LED for easy monitoring of device status
- Maximum frame size of 1632 bytes
- Support 8k MAC address
- IP40 protection class
- FCC Class A & CE approved





# >>Specifications

#### **Interface**

- 8 x Ethernet port (RJ45) 10/100/1000Base-Tx
- 2 x Optical port (SFP) 1000Base-Fx

#### **Optical Port**

- Available for 1310nm and 1550nm Single mode, and 850nm Multi mode
- Transfer Distance: up to 120km
- · Connectors: SFP
- Fiber core: 8.3μm, 8.7μm, 9μm and 10μm on single-mode fiber; 50, 62.5 and 100μm on multi-mode fiber

#### **Ethernet Port**

- Standard: IEEE802.3, IEEE802.3u, IEEE 802.3ab, IEEE802.3z
- Available speed: force 10Mbps, force 100Mbps, force 1000Mbps and auto-detective 10/100/1000Mbps Full-Duplex and Half-Duplex auto-negotiation
- Connectors: RJ-45 Connector; MDI/MDI-X connection autosensing

#### **Switch Properties**

• MAC Table: 8K

Packet Buffer: 1MbitSwitching Delay: <5µs</li>

#### **LED Indicators**

• Power Status, Speed Status, FX Link/Act, TX Link/Act

#### **Power Requirement**

Input: 12VDC~48VDCConsumption: MAX 13W

Reverse Connection Protection: SupportRedundancy Protection: Support

### **Physical Characteristics**

Housing: Metal enclosure

• Protection Class: IP40

• Dimensions: 53 x 165 x 145mm

· Weight: 0.85kg

• Installation: DIN-Rail or Panel mounting

#### **Environmental Limits**

- Operating Temperature: -40°C to 85°C
- Storage Temperature: -40°C to 85°C
- Operating Humidity: 10% to 95% RH (non-condensing)
- Storage Humidity: 5% to 95% RH (non-condensing)

#### **Agency Approvals**

• FCC Part 15 of Class A & CE approved

#### **Industrial Standard**

- EMI: FCC/CE/LVD/EMC
- EMS:

IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (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: ±2kV/DM, ±4kV/CM;

Data Port: ±2kV

IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-

80MHz)

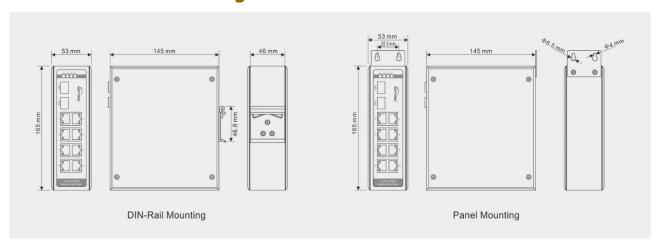
IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

Shock: IEC 60068-2-27Free Fall: IEC 60068-2-32Vibration: IEC 60068-2-6

#### Warranty

• 5 years

## >> Mechanical Drawing





# >>Ordering Information

OPT-IES2028	8*10/100/1000Base-Tx to 2*GE SFP Fiber ports			
Optional SFP				
Model	Rate	Wavelength	Distance	Connector
SFP-SX-MM-0205I	1.25Gbps	850nm	0.5km	2xLC
SFP-LX-SM-0220I	1.25Gbps	1310nm	20km	2xLC
SFP-LX-SM-0240I	1.25Gbps	1310nm	40km	2xLC

80km

2xLC

## >>Important Notice

1.25Gbps

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1550nm

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