

OPT-IES2028 Series Industrial Ethernet Switch

2*SFP to 8*10/100/1000Base-Tx

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 auto-negotiation
- 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 auto-sensing

Switch Properties

- MAC Table: 8K
- Packet Buffer: 1Mbit
- Switching Delay: <5μs

LED Indicators

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

Power Requirement

- Input: 12VDC~48VDC
- Consumption: MAX 13W
- Reverse Connection Protection: Support
- Redundancy 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

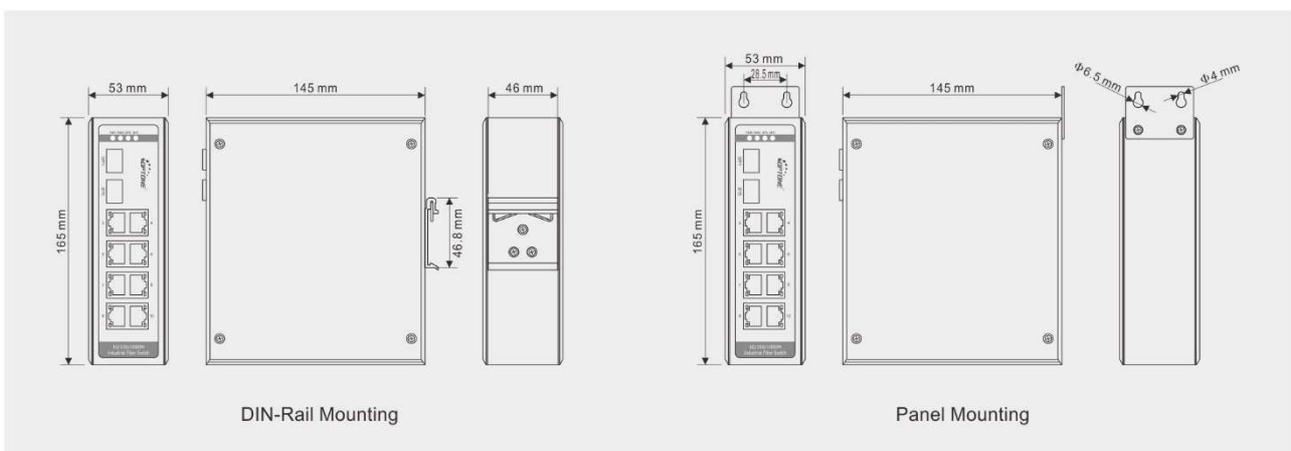
Industrial Standard

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

Warranty

- 5 years

>> Mechanical Drawing





>>Ordering Information

OPT-IES2028 2*SFP Fiber ports to 8*10/100/1000Base-Tx

Optional SFP

| <i>Model</i> | <i>Rate</i> | <i>Wavelength</i> | <i>Distance</i> | <i>Connector</i> |
|-----------------|-------------|-------------------|-----------------|------------------|
| SFP-SX-MM-0205I | 1.25Gbps | 850nm | 0.5km | LC |
| SFP-LX-SM-0220I | 1.25Gbps | 1310nm | 20km | LC |
| SFP-LX-SM-0240I | 1.25Gbps | 1310nm | 40km | LC |
| SFP-ZX-SM-0280I | 1.25Gbps | 1550nm | 80km | LC |

>>Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by OPTONE before they become applicable to any particular order or contract. In accordance with the OPTONE policy of continuous improvement specifications may change without notice.

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