

## OPT-IES2011P Industrial Ethernet Switch

10/100/1000Base-Tx(PoE) to GE SFP

RoHS Compliant



### >>Description

OPT-IES2011P is OPTONE produced unmanaged PoE switches, providing 1 Gigabit Ethernet fiber optional port and 1 10/100/1000Base-TX PoE ports compliant with IEEE802.3af and IEEE802.3at. While transmitting data over the cable, each PoE port can output 30 watts to PoE terminals directly, eliminating the need for additional wiring. OPT-IES2011P supports wide operating temperature range from -40°C to 85°C, metal housing with IP40 protection class and redundant power inputs, becoming an economical and harsh environment resistant solution for the ITS, video surveillance and other automation applications.

### >>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 802.3x auto-negotiation
- IEEE 802.3at, IEEE 802.3af PoE standard compliance
- Support PD detection and PD classification
- Supports auto MDI/MDIX function
- Status LED for easy monitoring of device status
- Supports up to 10K Byte Jumbo frames
- Support 8k MAC address
- Supports DIN-Rail and hang wall mounting
- Support dual power supply backup
- IP40 protection class

## >> Specifications

### Interface

- 1 x Ethernet+PoE port (RJ45) 10/100/1000Base-Tx
- 1 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

- Cable: Cat 5/5e/6 UTP cable
- 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

### Standard

- IEEE802.3 (10Base-T)
- IEEE802.3u (100Base-TX)
- IEEE802.3ab (1000Base-T)
- IEEE802.3z (1000Base-SX/LX/CX/T)
- IEEE802.3x (Flow control)
- IEEE802.3af (Power over Ethernet Standard)
- IEEE802.3at (Power over Ethernet enhancements Standard)

### Switch Properties

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

### LED Indicators

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

### PoE Specification

- Power Output: PoE 48V DC
- PoE Power Supply type: End-Span
- Power Pin Assignment: 1/2(+), 3/6(-)
- PoE Power Budget: Each port provides max 30W feed power

### Power Requirement

- Input: 48VDC
- Consumption: MAX 2.8W(no PD), 32.8W(full PD)
- Overload Protection: Support
- Reverse Connection Protection: Support
- Redundancy Protection: Support

### Physical Characteristics

- Housing: Metal enclosure
- Protection Class: IP40
- Dimensions: 36 x 120 x 103mm(Excluding the connector, DIN rail and component for panel mounting)
- Weight: 0.4kg
- 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

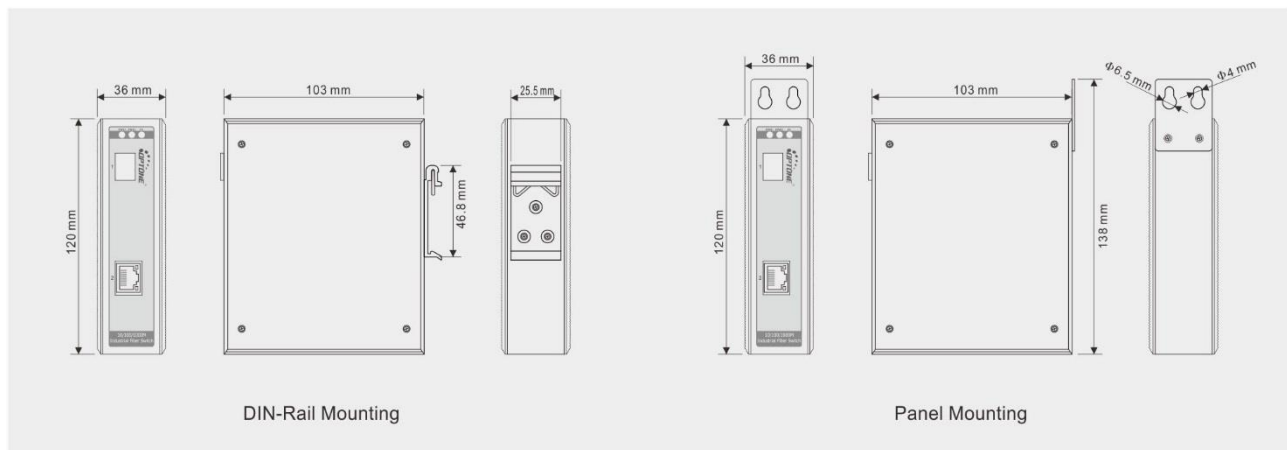
### Industrial Standard

- 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

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|--------------|--|
| OPT-IES2011P | 10/100/1000Base-Tx(PoE) to GE SFP Fiber port |
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### 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           | 2xLC             |
| SFP-LX-SM-0220I | 1.25Gbps    | 1310nm            | 20km            | 2xLC             |
| SFP-LX-SM-0240I | 1.25Gbps    | 1310nm            | 40km            | 2xLC             |
| SFP-ZX-SM-0280I | 1.25Gbps    | 1550nm            | 80km            | 2xLC             |

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## >>Important Notice

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