OPT-IES2024
Industrial Ethernet Switch

4*10/100/1000Base-Tx to 2*GE SFP

RoHS Compliant

>>Description

The OPT-IES2024 series industrial Gigabit media converters are designed to provide reliable and stable 10/100/1000BaseT(X) to 1000Base-FX SFP media conversion in harsh industrial environments. OPT-IES2024 series supports redundant power inputs, IP40 protection class and meets EMC industrial level 4 requirements. Its operating temperature ranges from -40 to 85°C. Belonging to Optone Green Ethernet switches series.

>>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

- Extends distances ranging from 550m (multi-mode fiber) to 120km (single mode fiber)

- Supports auto MDI/MDIX function

- Status LED for easy monitoring of device status

- Supports up to 10K Byte Jumbo frames

- Support 8k MAC address

- IP40 protection class

- FCC Class A & CE approved

>>Specifications

Interface
- 4 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: 9/125μm on single-mode fiber, 50/125μm and 62.5μm 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)

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

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

Power Requirement
- Input: 12VDC~48VDC
- Overload Protection: Support
- Reverse Connection Protection: Support
- Redundancy Protection: Support

Physical Characteristics
- Housing: Metal enclosure
- Protection Class: IP40
- Dimensions: 36 x 120 x 103mm
- Weight: 0.47kg
- 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)

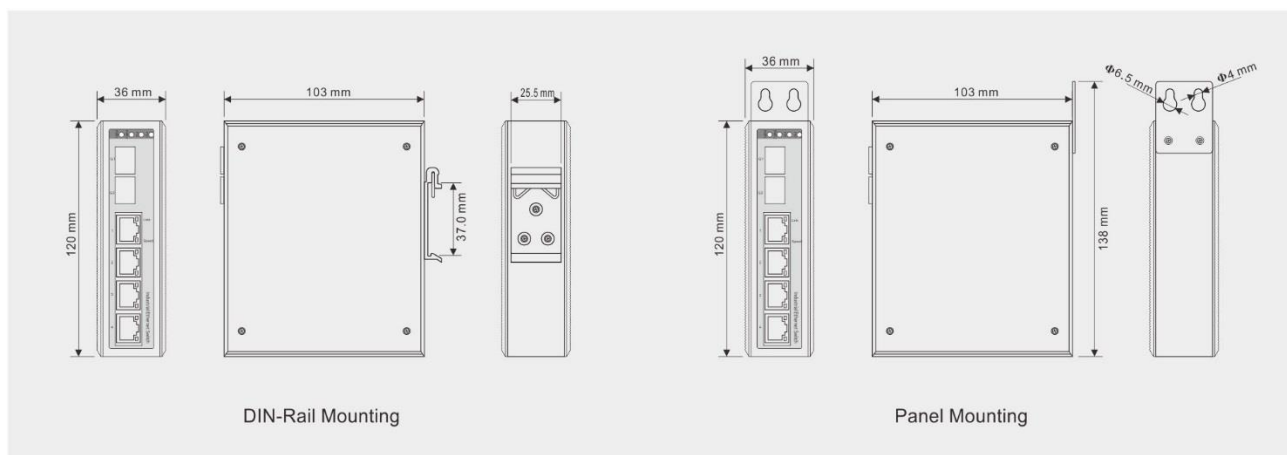### Agency Approvals
- FCC Part 15 of Class A & CE approved

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

DIN-Rail Mounting

Panel Mounting

>>Ordering Information

OPT-IES2024	4*10/100/1000Base-Tx to 2*GE SFP Fiber port

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
SFP-ZX-SM-0280I	1.25Gbps	1550nm	80km	2xLC

>>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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sales@optone.net
http://www.optone.net