

Product Datasheet

5-port 10/100M Industrial bt PoE Fiber Switch (ONV-IPS31004PF-bt)



OVERVIEW

The ONV-IPS31004PF-bt is a 10/100M unmanaged industrial bt PoE fiber switch independently developed by ONV. It has 4*10/100Base-TX adaptive RJ45 ports and 1*155M uplink SC fiberports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard and single-port max output power is 90W. As a PoE power supply device, it can automatically detect and recognize the power-receiving equipment that meets the standard and supply power through the network cable. It provides stable and safe terminals for PTZ network domes, high-power wireless AP, high-power network multimedia speakers, and high-power POE lighting, etc. through a network cable to meet the network environment that needs high-density PoE power supply. It is suitable for intelligent transportation, rail transit, electric power, mining, metallurgy and green energy. Industrial scenes such as construction set up a cost-effective and stable communication network. Unmanaged model, plug and play, no configuration, easy to use.

FEATURE

- **10/100M access, uplink SC fiber port**
- ◇ Support non-blocking wire-speed forwarding.

- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- ◇ Support 100M RJ45 port and fiber port combination, allowing users to flexibly network to meet networking needs in various scenarios.

■ Smart PoE power supply

- ◇ 4*10/100Base-TX RJ45 ports support bt PoE power supply, meeting the needs of high-power PoE power supply in the industrial field.
- ◇ Priority system for PoE port, It will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- ◇ The max output power of single-port PoE is 90W and the backward compatibility IEEE 802.3af/at PoE standard automatically identifies PoE devices for power supply without damaging non-PoE devices.

■ Stable and reliable

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link, and PoE.
- ◇ Low power consumption, no fan, aluminum shell, and excellent heat dissipation to ensure the stable operation of the switch.

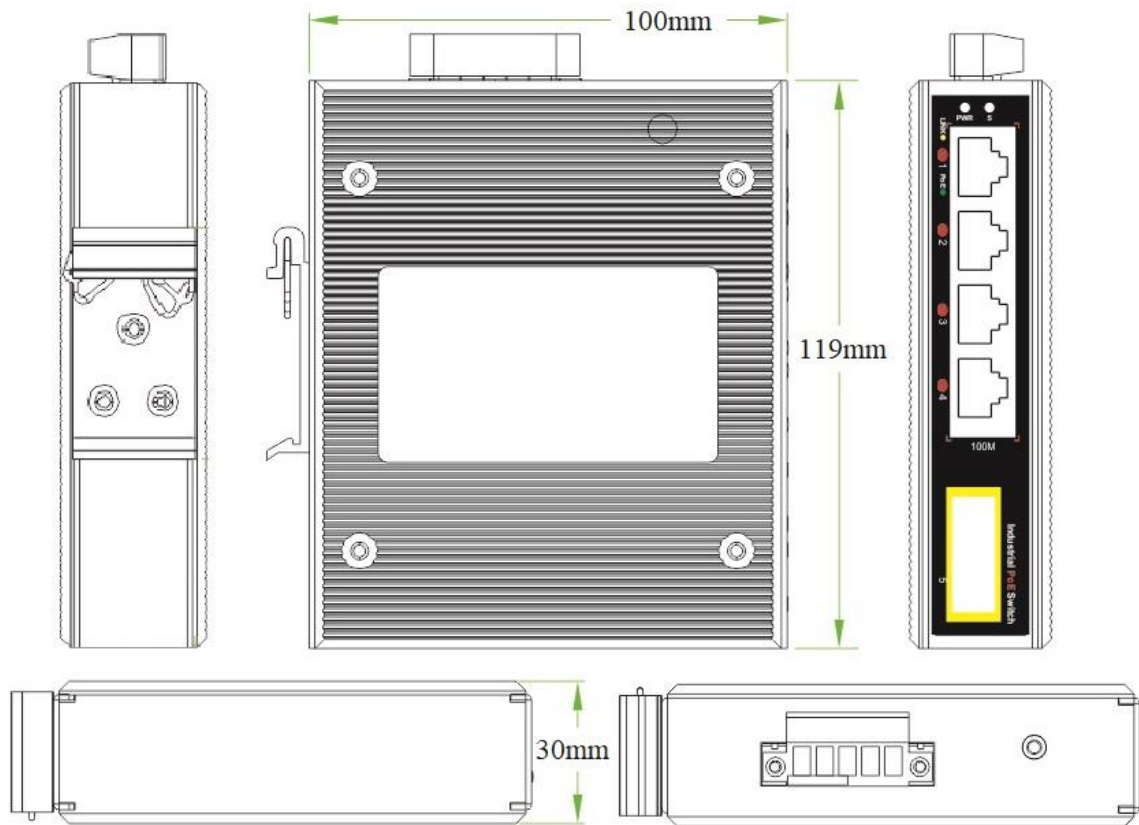
TECHNICAL SPECIFICATION

| Model | ONV-IPS31004PF-bt |
|----------------------------------|---|
| Interface Characteristics | |
| Fixed Port | 1*155M uplink SC fiber port (Data) 4*10/100Base-TX bt PoE ports (Data /Power) 2 set of V+, V- redundant DC power ports (5 Pin Phoenix terminal) |
| Ethernet Port | Port 1-4 can support 10/100Base-TX auto-sensing, full/ half duplex MDI/ MDI-X self-adaption |
| Twisted Pair | 10BASE-T: Cat3,4,5 UTP (≤100 meters) |

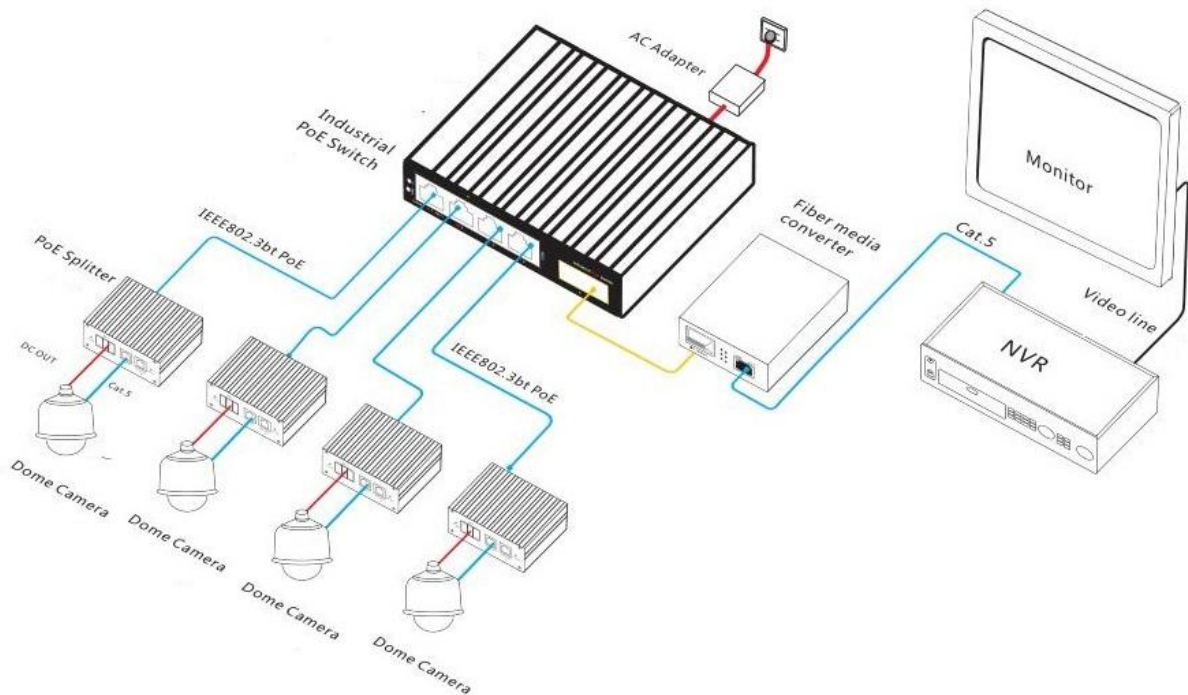
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|-------------------------------|---|
| Transmission | 100BASE-TX: Cat5 or later UTP (≤100 meters) |
| Optical Fiber Port | Default optical module is single-mode dual fiber 20km, SC port. (optional single-mode single fiber and multi-mode dual fiber optical module) |
| Optical Cable/ Distance | Multi-mode: 850nm/ 0-500m, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km |
| Chip Parameter | |
| Network Protocol | IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3u 100Base-FX, IEEE 802.3x |
| Forwarding Mode | Store and Forward (Full Wire Speed) |
| Switching Capacity | 1.6Gbps (non-blocking) |
| Forwarding Rate@64byte | 0.74Mpps |
| MAC | 1K |
| Buffer Memory | 768K |
| Jumbo Frame | 1636bytes |
| LED Indicator | Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: 5 (Green) |
| PoE & Power Supply | |
| PoE Port | Port 1-4 |
| Power Supply Pin | 1/2(+)/3/6 (-) 4/5(+)/7/8 (-) |
| Max Power Per Port | 90W, IEEE 802.3 af/at/bt |
| Power Consumption | Standby<4W, Full Load<240W |
| Input Voltage/ Interface | DC48-57V, 5P industrial phoenix terminal, anti-reverse protection |
| Power Supply | No, optional 48V/240W industrial power supply |
| Physical Parameter | |
| Operation TEMP/ Humidity | -20~+75°C, 5%~90% RH Non condensing |
| Storage TEMP/ | -40~+85°C, 5%~95% RH Non condensing |

| | |
|-------------------------------------|---|
| Humidity | |
| Dimension (L*W*H) | 119*100*30mm |
| Net /Gross Weight | 0.4kg /0.5kg |
| Installation | Desktop, 35mm DIN Rail |
| Certification & Warranty | |
| Lightning Protection | <p>Protection level: IP40</p> <p>Lightning protection: 6KV 8/20us</p> <p>IEC61000-4-3 (RS):10V/m (80~1000MHz)</p> <p>FCC Part 15/CISPR22 (EN55022): Class B</p> <p>IEC61000-6-2 (Common Industrial Standard)</p> <p>IEC61000-4-9 (Pulsed magnet field): 1000A/m</p> <p>IEC61000-4-10 (Damped oscillation): 30A/m 1MHz</p> <p>IEC61000-4-12/18 (Shockwave): CM 2.5kV, DM 1kV</p> <p>IEC61000-4-4(EFT): Power cable: ±4kV; data cable: ±2kV</p> <p>IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s</p> <p>IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge</p> <p>IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz)</p> <p>IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s</p> <p>IEC61000-4-5 (Surge): Power cable: CM±4kV/ DM±2kV, data cable: ±4kV</p> |
| Mechanical Properties | IEC60068-2-6 (Anti Vibration), IEC60068-2-27 (Anti Shock), IEC60068-2-32 (Free Fall) |
| Certification | CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS |
| Warranty | 5 years, lifelong maintenance. |

DIMENSION



APPLICATION



ORDERING INFORMATION

| Model | Description | Recommended Power Supply |
|---------------------|---|--------------------------|
| ONV-IPS31004PF-bt | Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm /20km single-mode dual fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. | 240W |
| ONV-IPS31004PF-M-bt | Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (850nm/ 0.5km or 1310nm/ 2km multi-mode dual fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. | 240W |
| ONV-IPS31004PF-A-bt | Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm/ 20km single-mode single fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. | 240W |
| ONV-IPS31004PF-B-bt | Unmanaged industrial bt PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1550nm/ 20km single-mode single fiber optical module). Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. | 240W |

Note: The power supply is not included and needs to be purchased.

PACKING LIST

| | Content | Qty | Unit |
|--------------|---|-----|------|
| Packing List | 5-port 10/100M industrial bt PoE fiber switch | 1 | SET |
| | User Guide | 1 | PC |
| | Warranty Card | 1 | PC |

POWER SUPPLY

| Product | Model | Description | Unit |
|---------------------------------------|--------------|--|------|
| 120W DIN Rail Industrial Power Supply | GWS-DP120-48 | DIN Rail 120W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 2.3A Output Voltage: DC48V, 2.5A Operation Temperature: -40°C to +70°C | PC |
| 240W DIN Rail Industrial Power Supply | GWS-DP240-48 | DIN Rail 240W single set of output power supply Input Voltage: AC 100V~240V 50-60Hz, 3.0A Output Voltage: DC48V, 5.0A Operation Temperature: -40°C to +70°C | PC |
| 480W DIN Rail Industrial Power Supply | GWS-DP480-48 | DIN Rail 480W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 5.0A Output Voltage: DC48V, 10A Operation Temperature: -40°C to +70°C | PC |

RELATED PRODUCT

| Model | Description |
|------------------|--|
| ONV-IPS31064P-bt | Unmanaged industrial bt PoE switch with 6*10/100M RJ45 ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE |

| | |
|--------------------|--|
| | 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. |
| ONV-IPS33064P-bt | Unmanaged industrial bt PoE switch with 6*10/100/1000M RJ45 ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. |
| ONV-IPS33064PF-bt | Unmanaged industrial bt PoE switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. |
| ONV-IPS33064PFG-bt | Unmanaged industrial bt PoE fiber switch with 4*10/100/1000M RJ45 ports and 1*10/100/1000M RJ45 port and 1*1000M uplink SFP fiber port. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. |
| ONV-IPS33064PFM-bt | L2+ managed industrial bt PoE fiber switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-4 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. |
| ONV-IPS57128PFM-bt | L2+ managed industrial bt PoE fiber switch with 8*10/100/1000/2500M RJ45 ports and 4*1/10G uplink SFP+ fiber ports. Port 1-8 can support bt PoE output and are backward compatible with IEEE 802.3 af/at PoE standard. It supports dual DC power supply input and DIN rail mounting. |

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