

Product Datasheet

2-port 10/100M Industrial PoE Switch

(ONV-IPS1021PF)



OVERVIEW

The ONV-IPS1021PF is a 10/100M industrial PoE fiber switch independently developed by ONV. It has 1*10/100M RJ45 port and 1*155M uplink SC fiber port. Port 1 can support IEEE 802.3 af/at PoE standard and single-port PoE power up to 30W. 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. The network cable can supply power to PoE terminal devices such as wireless AP, IP cameras, and industrial sensors. It also meets the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, power industry, mining, petroleum, and sea transportation. Industrial scenes such as metallurgy and green energy, construction form a cost-effective, stable, and reliable communication network. Unmanaged mode, plug and play, no configuration, easy to use.

FEATURE

- 100M RJ45 and SC port

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Optical Network Video Technologies (Shenzhen) Co., Ltd.

ONV

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support 10/100M RJ45 port and 155M SC fiber port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ Smart PoE power supply

- ◇ Comply with IEEE 802.3 af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.
- ◇ 1*10/100Base-TX RJ45 port can support PoE power supply to meet the needs of PoE power supply in various scenarios in the industrial field.

■ 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 housing, and excellent heat dissipation to ensure the stable operation of the switch.

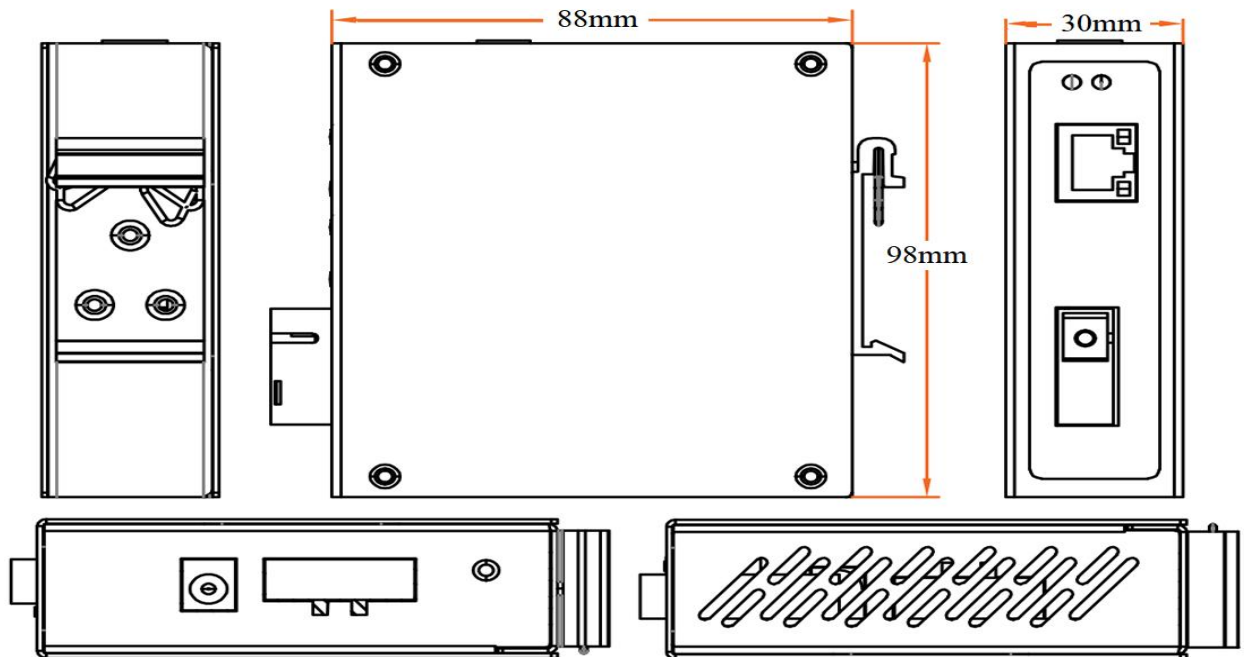
TECHNICAL SPECIFICATION

| Model | ONV-IPS1021PF |
|----------------------------------|---|
| Interface Characteristics | |
| Fixed Port | 1*155M uplink SC fiber port (Data) 1*10/100Base-TX PoE port (Data/Power) |
| Ethernet Port | Port 1 can support 10/100Base-TX auto-sensing, full/ half duplex MDI/ MDI-X self-adaption |
| Twisted Pair Transmission | 10BASE-T: Cat3,4,5 UTP (≤100 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) |
| Optical Fiber Port | Optical module is single-mode dual fiber 20km, SC port |
| Optical Cable/ Distance | Multi-mode: 850nm/ 0-550m, 1310nm/ 0-2km, 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 | 1.0Gbps (non-blocking) |
| Forwarding Rate@64byte | 0.3Mpps |
| MAC | 1K |
| Buffer Memory | 512K |
| Jumbo Frame | 2048bytes |
| LED Indicator | Power: PWR (Green), PoE: PoE (Green), Network: Link (Yellow), Fiber port: 2 (Green) |
| PoE&Power Supply | |
| PoE Port | Port 1 |
| Power Supply Pin | 1/2(+) 3/6 (-) |
| Max Power Per Port | 30W, IEEE 802.3 af/at |
| Power Consumption | Standby<1W, Full load af<15, at<30W |
| Working Voltage | DC44-56V, 3P industrial terminal and DC jack, support anti-reverse protection |
| Power Supply | No, optional 48V/36W industrial power supply |
| Physical Parameter | |
| Operation Temp/ Humidity | -40~+75°C, 5%~90% RH Non condensing |
| Storage Temp/ Humidity | -40~+85°C, 5%~95% RH Non condensing |
| Dimension (L*W*H) | 98*88*30mm |
| Net /Gross Weight | 0.25kg/ 0.35kg |
| Installation | Desktop, 35mm DIN Rail |
| Certification & Warranty | |
| Lightning Protection | Protection level: IP30 Lightning protection: 6KV 8/20us IEC61000-4-3 (RS):10V/m (80~1000MHz) |

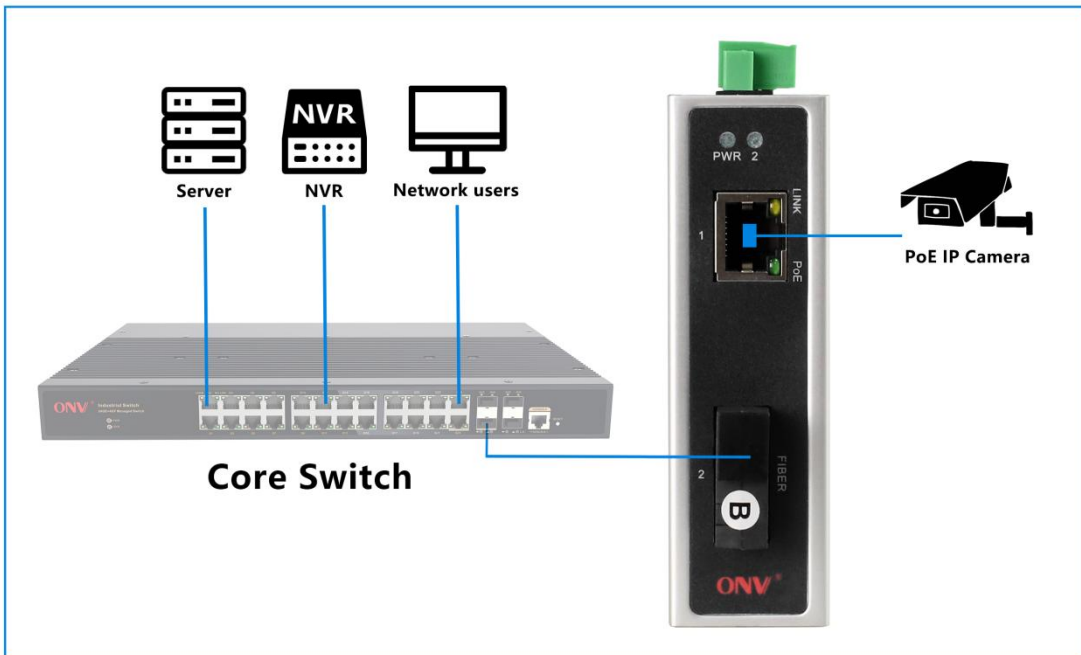
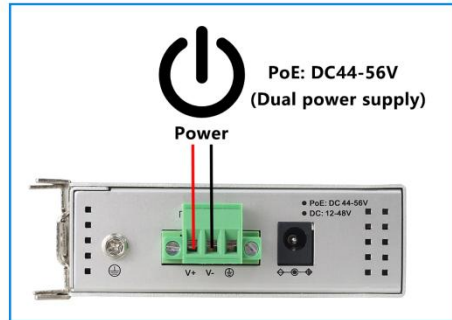
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| | <p>FCC Part 15/CISPR22 (EN55022): Class A</p> <p>IEC61000-6-2 (Common Industrial Standard)</p> <p>IEC61000-4-9 (Pulsed magnet field): 1000A/m</p> <p>IEC61000-4-10 (Damped oscillation): 30A/m 1MHz</p> <p>IEC61000-4-12/18 (Shockwave): CM2.5kV, DM1kV</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), IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock) |
| Certification | CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS |
| Warranty | 5 years, lifelong maintenance. |

DIMENSION



APPLICATION

-  **Plug and play**
-  **Wide temperature range**
-  **DIN Rail installation**



ORDERING INFORMATION

| Model | Description | Recommended Power Supply |
|-----------------|--|--------------------------|
| ONV-IPS1021PF | Unmanaged industrial PoE fiber switch with 1*10/100M RJ45 port and 1*155M uplink SC fiber port (1310nm /20km single-mode dual fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting. | 36W |
| ONV-IPS1021PF-A | Unmanaged industrial PoE fiber switch with 1*10/100M RJ45 port and 1*155M uplink SC fiber port (1310nm /20km | 36W |

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|-----------------|--|-----|
| | single-mode single fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting. | |
| ONV-IPS1021PF-B | Unmanaged industrial PoE fiber switch with 1*10/100M RJ45 port and 1*155M uplink SC fiber port (1550nm /20km single-mode single fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting. | 36W |

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

PACKING LIST

| Packing List | Content | Qty | Unit |
|--------------|---|-----|------|
| | 2-port 10/100M industrial PoE switch | 1 | SET |
| | User Guide | 1 | PC |
| | Warranty Card and Certificate of Conformity | 1 | PC |

POWER SUPPLY

| Product | Model | Description | Unit |
|--------------------------------------|-------------|--|------|
| 36W Desktop Power Adapter | GWS-AP36-52 | Desktop 36W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 0.56A Output Voltage: DC52V, 0.7A Operation Temperature: -20°C to +65°C | PC |
| 36W DIN Rail Industrial Power Supply | GWS-DP36-48 | DIN Rail 36W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 0.56A Output Voltage: DC48V, 0.75A Operation Temperature: -40°C to +70°C | PC |

CONTACT US

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