Product Datasheet

12-port Gigabit Industrial PoE Switch

(ONV-IPS33128PF)



OVERVIEW

The ONV-IPS33128PF is a Gigabit industrial PoE fiber switch independently developed by ONV. It has 10*10/100/1000Base-T adaptive RJ45 ports and 2*1000Base-X uplink SFP fiber ports. Port 1-8 can support IEEE 802.3 af/at PoE standard and the single-port PoE power up to 30W. As a PoE power supply device, it can automatically detect and identify the power-receiving devices that meet the standards and power them through the network cable. It can power wireless AP, IP cameras, industrial sensors, and other PoE terminal devices through the network cable to meet the network environment that requires a high-density PoE power supply. It is suitable for industrial scenarios such as intelligent transportation, rail transportation, power industry, mining, petroleum, shipping, metallurgy, and green energy to build an economical, efficient, stable, and reliable communication network. Unmanaged mode, plug and play, no configuration, simple and convenient to use.

FEATURE

Gigabit access

- Support non-blocking wire-speed forwarding.
- ♦ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit RJ45 port and uplink SFP fber 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.
- Priority system for PoE port will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- ♦ 8*10/100/1000Base-T RJ45 ports support PoE power, meeting the PoE power requirements of security monitoring, industrial automation systems, wireless coverage and other scenarios.

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

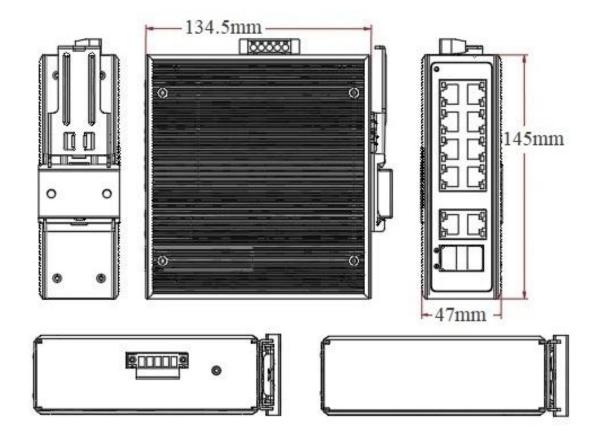
TECHNICAL SPECIFICATION

| Model | ONV-IPS33128PF | |
|---------------------------|---|--|
| Interface Characteristics | | |
| Fixed Port | 2*1000Base-X uplink SFP fiber ports (Data) 2*10/100/1000Base-T uplink RJ45 ports (Data) 8*10/100/1000Base-T PoE ports (Data/ Power) | |
| | 2 set V+, V- redundant DC power port (5P industrial Phoenix terminal) | |

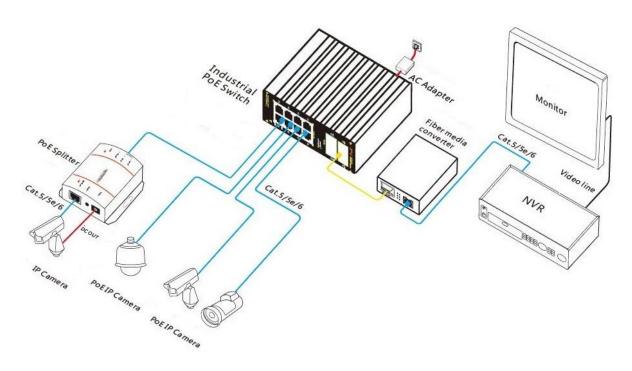
| Ethernet Port | Port 1-10 can support 10/100/1000Base-T(X) auto-sensing, full/ half duplex | |
|---------------------------|--|--|
| Ellellet Folt | MDI/ MDI-X self-adaption | |
| | 10BASE-T: Cat3,4,5 UTP (≤100 meters) | |
| Twisted Pair Transmission | 100BASE-TX: Cat5 or later UTP (≤100 meters) | |
| | 1000BASE-T: Cat5e or later UTP (≤100 meters) | |
| Optical Fiber Port | Gigabit optical fiber port, default no include optical module (optional | |
| Optical Fiber Fort | single-mode/ multi-mode, single fiber/ dual fiber optical module. LC) | |
| Optical Cable/ Distance | Multi-mode: 850nm/ 0-550m, Single-mode: 1310nm/ 0-40km, 1550nm/ | |
| Optical Cable/ Distance | 0-120km. | |
| Chip Parameter | | |
| Network Protocol | IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX, | |
| Network Protocol | IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x | |
| Forwarding Mode | Store and Forward (Full Wire Speed) | |
| Switching Capacity | 24Gbps (non-blocking) | |
| Forwarding Rate@64byte | byte 17.86Mpps | |
| MAC | 2K | |
| Buffer Memory | 2M | |
| Jumbo Frames | 9.2K | |
| LED Indicator | Power: PWR (Green), Network: Link, Link/Act (Yellow), PoE: PoE (Green) | |
| PoE& Power Supply | | |
| PoE Port | Port 1- 8 | |
| Power Supply Pin | 1/2(+) 3/6 (-) | |
| Max Power Per Port | 30W, IEEE 802.3 af/at | |
| Power Consumption | Standby<8W, Full load af<120W, at<240W | |
| Input Voltage/ Interface | DC48-57V, 5P industrial Phoenix terminal, support anti-reverse protection. | |
| Power Supply | No, optional 48V/120W or 48V/240W industrial power supply | |
| Physical Parameter | | |
| Operation Temp/ Humidity | -40~+80°C, 5%~90% RH Non condensing | |
| Storage Temp/ Humidity | -40~+85°C, 5%~95% RH Non condensing | |
| | | |

| Dimension | 145*134.5*47mm | | |
|--------------------------|--|--|--|
| Net /Gross Weight | 0.9kg/ 1.15kg | | |
| Installation | Desktop, 35mm DIN Rail | | |
| Certification & Warranty | | | |
| | IEC61000-4-3 (RS):10V/m (80~1000MHz) | | |
| | FCC Part 15/CISPR22 (EN55022): Class A | | |
| | IEC61000-6-2 (Common Industrial Standard) | | |
| | IEC61000-4-9 (Pulsed magnet field): 1000A/m | | |
| | IEC61000-4-10 (Damped oscillation): 30A/m 1MHz | | |
| | IEC61000-4-12/18 (Shockwave): CM2.5kV, DM1kV | | |
| Lightning Protection | Protection level: IP40, Lightning protection: 6KV 8/20us | | |
| | IEC61000-4-4(EFT): Power cable: ±4kV, data cable: ±2kV | | |
| | IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s | | |
| | IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge | | |
| | IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz) | | |
| | IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s | | |
| | IEC61000-4-5 (Surge): Power cable: CM±4kV/ DM±2kV, data cable: ±4kV | | |
| Mechanical Properties | IEC60068-2-6 (Anti Vibration), IEC60068-2-27 (Anti Shock), IEC60068-2-32 | | |
| Moonamoan Topernes | (Free Fall) | | |
| Certification | CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS | | |
| Warranty | 5 years, lifelong maintenance. | | |

DIMENSION



APPLICATION



ORDERING INFORMATION

| Model | Description | Recommended Power Supply |
|----------------|--|--------------------------|
| | Unmanaged industrial PoE fiber switch with | |
| ONV-IPS33128PF | 10*10/100/1000M RJ45 ports and 2*1000M uplink SFP | |
| | fiber ports. Port 1-8 can support IEEE 802.3 af/at PoE | 120W/240W |
| | standard. It can support dual DC redundant power input | |
| | (Phoenix terminal connection) and DIN rail mounting. | |

Note: The optical module and power supply are not included and need to be purchased.

PACKING LIST

| | Content | Qty | Unit |
|--------------|---|-----|------|
| Packing List | 12-port Gigabit industrial PoE switch | 1 | Set |
| | User Guide | 1 | PC |
| | Warranty Card and Certificate of Conformity | 1 | PC |

OPTICAL MODULE

| Product | Model | Description | Unit |
|----------------------|----------|--|------|
| 4.050 | 2630-G | Industrial SFP optical module, 1.25G multi-mode dual fiber 850nm, transmission distance: 550m, LC interface, supports DDM function and hot plugging. | PC |
| 1.25G Optical Module | 2632-G | Industrial SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging. | PC |
| | 2612-T-G | Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC | PC |

| | | interface, supports DDM function and hot plugging. | |
|--------|-------------|---|----|
| | | Industrial SFP optical module, 1.25G single-mode single fiber | |
| | 2613-R-G | TX1550nm/ RX1310nm, transmission distance: 20km, LC | PC |
| | | interface, supports DDM function and hot plugging. | |
| | | Industrial SFP optical module, 1.25G single-mode single fiber | |
| | 2612-T-SC-G | TX1310nm/ RX1550nm, transmission distance: 20km, SC | PC |
| | | interface, supports DDM function and hot plugging. | |
| | | Industrial SFP optical module, 1.25G single-mode single fiber | |
| | 2613-R-SC-G | TX1550nm/ RX1310nm, transmission distance: 20km, SC | PC |
| | | interface, supports DDM function and hot plugging. | |
| Power | 2633 | 1.25G SFP optical module transfers to 10/100/1000M RJ45 | PC |
| Module | 2033 | port. | FC |

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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℃ to +70℃ | PC |
| 240W DIN Rail Industrial Power Supply | GWS-DP240-48 | DIN Rail 240W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 3.0A Output Voltage: DC48V, 5.0A Operation Temperature: -40 ℃ to +70 ℃ | PC |

RELATED PRODUCT

| Model | Description | |
|----------------|--|--|
| ONV-IPS33032PF | Unmanaged industrial PoE fiber switch with 2*10/100/1000M RJ45 ports | |
| | and 1*1000M uplink SFP fiber port. Port 1-2 can support IEEE 802.3 af/at | |



| | PoE standard. It can support dual DC redundant power input (Phoenix |
|-----------------|---|
| | terminal connection) and DIN rail mounting. |
| | Unmanaged industrial PoE fiber switch with 2*10/100/1000M RJ45 ports |
| ONV-IPS33042PF | and 2*1000M uplink SFP fiber ports. Port 1-2 can support IEEE 802.3 af/at |
| ONV-1P333042PF | PoE standard. It can support dual DC redundant power input (Phoenix |
| | terminal connection) and DIN rail mounting. |
| | Unmanaged industrial PoE fiber switch with 4*10/100/1000M RJ45 ports |
| ONIV ID022064DE | and 2*1000M uplink SFP fiber ports. Port 1-4 can support IEEE 802.3 af/at |
| ONV-IPS33064PF | PoE standard. It can support dual DC redundant power input (Phoenix |
| | terminal connection) and DIN rail mounting. |
| | Unmanaged industrial PoE fiber switch with 8*10/100/1000M RJ45 ports |
| ONV-IPS33108PF | and 2*1000M uplink SFP fiber ports. Port 1-8 can support IEEE 802.3 af/at |
| | PoE standard. It can support dual DC redundant power input (Phoenix |
| | terminal connection) and DIN rail mounting. |

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