

Product Datasheet

6-port Gigabit Easy Managed Industrial PoE Switch (ONV-IPS53064PFGM)



OVERVIEW

The ONV-IPS53064PFGM is a Gigabit Easy managed industrial PoE switch independently developed by ONV. It has 1*100/1000Base-X uplink SFP fiber port and 5*10/100/1000Base-T adaptive RJ45 ports. Port 1-4 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 recognize the power-receiving equipment that meets the standard and supply power through the network cable. It can supply power to PoE terminal equipment such as wireless AP, IP camera, VoIP, and industrial sensors through the network cable. 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 industrial scenes such as shipping, metallurgy, and green energy construction forming a cost-effective, stable, and reliable communication network.

The ONV-IPS53064PFGM can support the ONV-NMS cloud platform to realize network

topology management, link aggregation, port management, PoE management, remote operation and maintenance, etc. It has high reliability, easy installation and maintenance, a fast switching function, and multiple access ports, suitable for access to LAN devices of various sizes.

FEATURE

■ Gigabit access, uplink SFP fiber port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support Gigabit RJ45 port and SFP 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.
- ◇ Support remote PoE management function, realize remote power on/off of PoE port, check port power status, query PoE port fault, etc.
- ◇ 4*10/100/1000Base-T RJ45 ports can support PoE power to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

■ Extreme Optimization, minimalist application

- ◇ Real-time fault alarm and fault location.
- ◇ Remote upgrade, remote restart, and factory reset.
- ◇ Cloud platform and mobile APP operation and maintenance management.
- ◇ Visualized PoE power supply control, network topology management, VLAN division, QoS, link aggregation, loop protection, port mirroring, port control, and bandwidth management.
- ◇ Practical network management functions are retained according to industry application requirements, and network deployment and centralized operation and maintenance can be quickly realized through the operation and maintenance platform.

■ Stable and reliable

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, and L/A.
- ◇ Low power consumption, aluminum alloy housing, and excellent heat dissipation to ensure the stable operation of the switch.

TECHNICAL SPECIFICATION

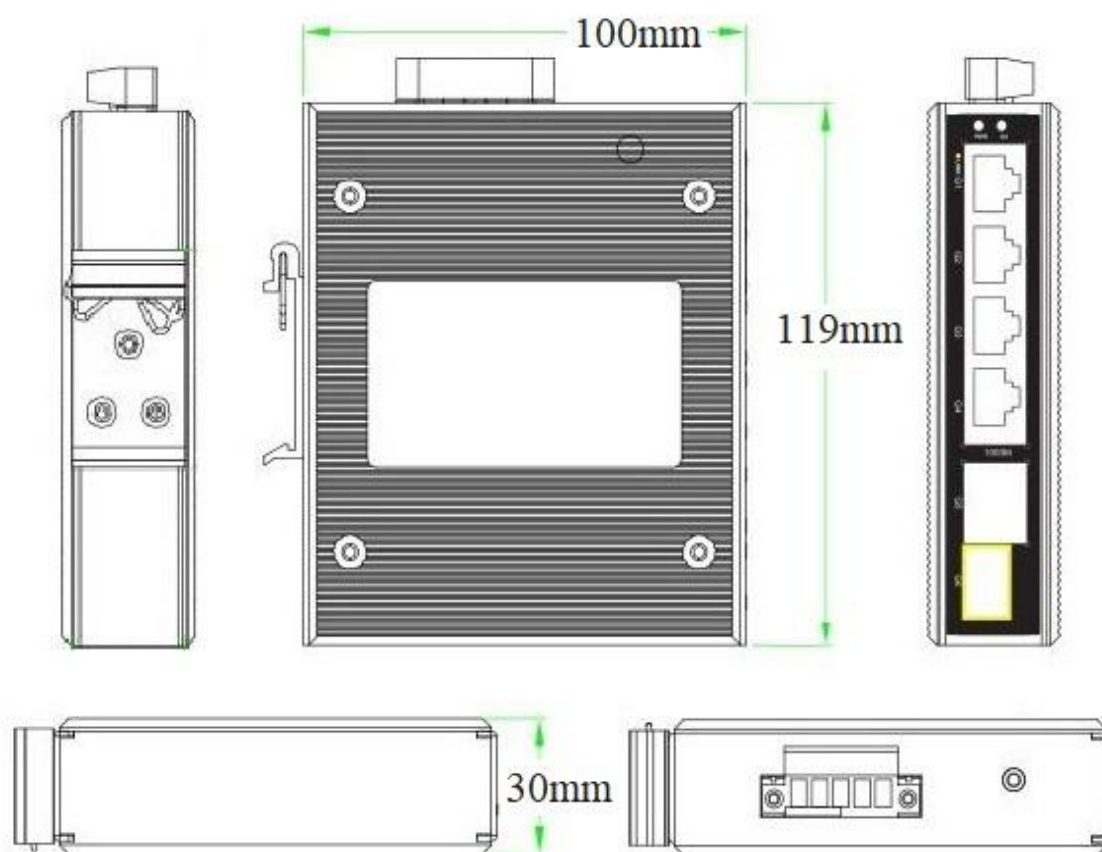
| Model | ONV-IPS53064PFGM |
|----------------------------------|--|
| Interface Characteristics | |
| Fixed Port | 1*DC5521 power jack 1*10/100/1000Base-T uplink RJ45 port (Data) 1*100/1000Base-X uplink SFP fiber port (Data) 4*10/100/1000Base-T PoE ports (Data/ Power) 2 set V+, V- redundant DC power port (5P Phoenix terminal) |
| Ethernet Port | Port 1-5 can support 10/100/1000Base-T 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) 1000BASE-T: Cat5e/6 or later UTP (≤100 meters) |
| Optical Fiber Port | Gigabit optical fiber interface, default no include optical module (optional 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/ 0-120km. |
| Chip Parameter | |
| Network Management Type | Web management, platform management |
| Network Protocol | IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX, |

| | |
|------------------------------------|---|
| | IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x |
| Forwarding Mode | Store and Forward (Full wire-speed) |
| Switching Capacity | 12Gbps (non-blocking) |
| Forwarding Rate@64byte | 8.93Mpps |
| MAC | 2K |
| Buffer Memory | 2M |
| Jumbo Frame | 9.2K |
| LED Indicator | Power/ System: SYS (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: L/A (Green) |
| Reset Switch | Press for 6 seconds and then release to restore to factory settings Short press twice (1 second interval) to switch to unmanaged state |
| PoE& Power Supply | |
| PoE Port | Port 1-4 |
| PoE Management | Port PoE output on/off, Port PoE real-time power view |
| Power Supply Pin | 1/2 (+) 3/6 (-) |
| Max Power Per Port | 30W, IEEE 802.3 af/at |
| Power Consumption | Standby<6W, Full load af<60W, at<120W |
| Input Voltage/ Interface | DC48-57V, 5P industrial Phoenix terminal, and DC5521 power jack. Support reverse connection protection. |
| Power Supply | No, optional 48V/60W or 48V/120W industrial power supply |
| Physical Parameter | |
| Operation Temp/ Humidity | -40°C~+75°C, 5%~90% RH non condensing |
| Storage Temp/ Humidity | -40°C~+85°C, 5%~95% RH non condensing |
| Dimension (L*W*H) | 119*100*30mm |
| Net /Gross Weight | 0.4kg/ 0.5kg |
| Installation | Desktop, 35mm DIN Rail |
| Certification& Warranty | |
| Lightning Protection | IEC61000-4-3 (RS):10V/m (80-1000MHz) FCC Part 15/CISPR22 (EN55022): Class A |

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| | 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 Protection level: IP40, Lightning protection: 6KV 8/20us IEC61000-4-4(EFT): Power cable: ± 4 kV, data cable: ± 2 kV IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s IEC61000-4-2 (ESD): ± 8 kV contact discharge, ± 15 kV 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 ± 4 kV/ DM ± 2 kV, data cable: ± 4 kV |
| Mechanical Properties | IEC60068-2-6 (Anti Vibration), IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock) |
| Certification | CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS |
| Warranty | 5 years, lifelong maintenance. |
| Network Management Feature | |
| Interface | IEEE Energy-saving and green Ethernet function Port traffic statistics, IEEE 802.3x flow control (Full-duplex) Port status display, Port duplex/ negotiation rate configuration |
| VLAN | Port-based IEEE802.1Q VLAN configuration (4K) |
| Port Aggregation | Static aggregation |
| Loop Protection | Loop protection function |
| Multicast | IGMP Snooping v1/v2, Max 256 multicast groups |
| Port Mirroring | Bidirectional data mirroring based on port |
| QoS | Diff-Serv QoS, Priority Mark/ Remark 8*Output queues of each port, 802.1p/DSCP priority mapping |
| Security | Broadcast storm control, Port isolation, Port speed limit |
| DHCP | DHCP Snooping |
| Management | ONV-NMS platform management (Cloud platform) |

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| | <p>Mobile APP operation and maintenance management</p> <p>One-key recovery, Cable Diagnose, Web Management</p> |
| System | <p>Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Cat5 and above Ethernet cable</p> <p>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, Mac OS X) installed on each computer in the network</p> <p>Cat5 and above Ethernet cable</p> |

DIMENSION



ORDERING INFORMATION

| Model | Description | Recommended Power Supply |
|------------------|---|--------------------------|
| ONV-IPS53064PFGM | Easy managed industrial PoE switch with 1*100/1000M uplink SFP fiber port and 5*10/100/1000M RJ45 ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal or DC power jack connection) and DIN Rail mounting. | 60W/120W |

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

PACKING LIST

| | Content | Qty | Unit |
|--------------|---|-----|------|
| Packing List | 6-port Gigabit Easy managed industrial PoE switch | 1 | Set |
| | User Guide | 1 | PC |
| | Warranty Card and Certificate of Conformity | 1 | PC |

OPTICAL MODULE

| Product | Model | Description | Unit |
|----------------------|----------|--|------|
| 1.25G Optical Module | 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 |
| | 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 |

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|--|-------------|--|----|
| | | interface, supports DDM function and hot plugging. | |
| | 2613-R-G | Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging. | PC |
| | 2612-T-SC-G | Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, SC interface, supports DDM function and hot plugging. | PC |
| | 2613-R-SC-G | Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, SC interface, supports DDM function and hot plugging. | PC |

POWER SUPPLY

| Product | Model | Description | Unit |
|---------------------------------------|--------------|---|------|
| 60W DIN Rail Industrial Power Supply | GWS-DP60-48 | DIN Rail 60W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 1.0A Output Voltage: DC48V, 1.25A Operation Temperature: -40℃ to +70℃ | PC |
| 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 |

RELATED PRODUCT

| Model | Description |
|-----------------|--|
| ONV-IPS53064PFM | Easy managed industrial PoE switch with 2*100/1000M uplink SFP fiber ports and 4*10/100/1000M RJ45 ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal or DC power jack connection) and DIN Rail mounting. |

ONV-IPS53108PFM

Easy managed industrial PoE switch with 2*100/1000M uplink SFP fiber ports and 8*10/100/1000M RJ45 ports. Port 1-8 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal or DC power jack connection) and DIN Rail mounting.

CONTACT US



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