

## Product Datasheet

# 6-port Gigabit Industrial PoE Switch

(ONV-IPS33064PFG)



## OVERVIEW

The ONV-IPS33064PFG is a Gigabit industrial PoE fiber switch independently developed by ONV. It has 5\*10/100/1000Base-T adaptive RJ45 ports and 1\*1000Base-X uplink SFP fiber port. Ports 1-4 support the IEEE 802.3af/at PoE standard and 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 APs, IP cameras, industrial sensors, and other PoE terminal devices through the network cable to meet network environments that require 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. Plug-and-play, 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 ports and SFP fiber port combinations for high-speed, high-bandwidth connections to meet the networking needs of various scenarios.

### ■ Smart PoE power supply

- ◇ Compliant with the IEEE 802.3 af/at PoE standard, automatically identifies PoE devices for power supply, and does not damage non-PoE devices.
- ◇ The priority system for PoE ports will supply power to the high-priority port first when the power budget is insufficient and avoid overloading the device.
- ◇ 4\*10/100/1000Base-T RJ45 ports support PoE power supply to meet the PoE power supply needs of security monitoring, conference call systems, wireless coverage, and other scenarios.

### ■ Stable and reliable

- ◇ CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicators for PWR, Link, and PoE.
- ◇ Low power consumption, aluminum alloy housing, and excellent heat dissipation ensure stable operation of the switch.

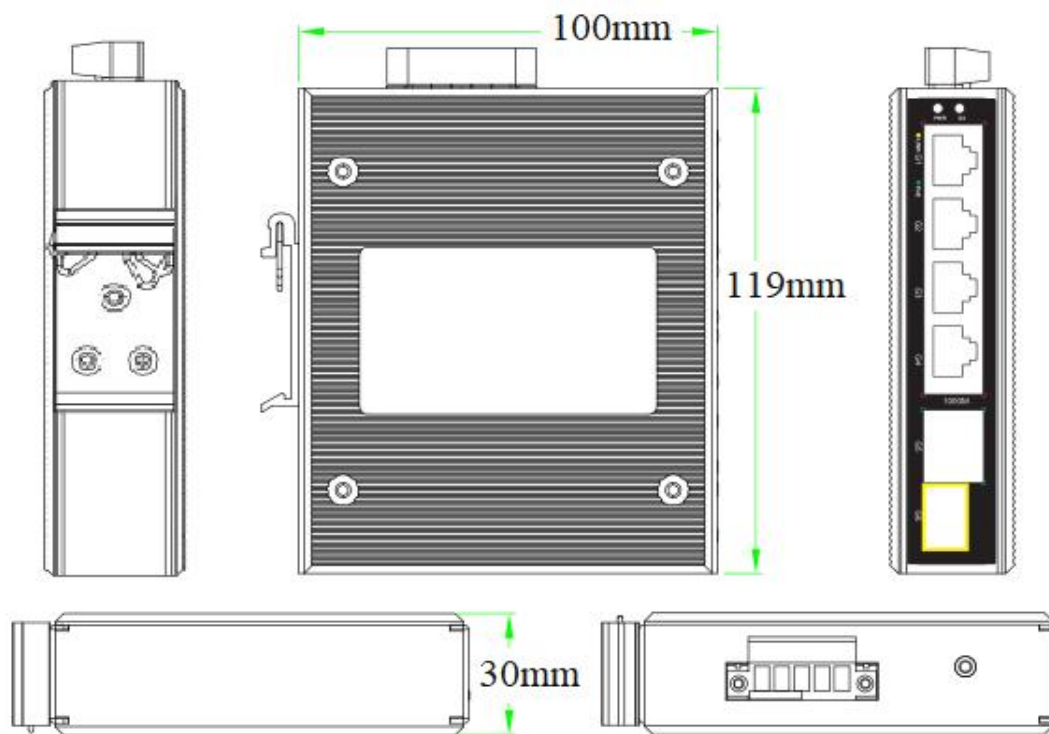
## TECHNICAL SPECIFICATION

| Model                            | ONV-IPS33064PFG                                                                                                                         |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Interface Characteristics</b> |                                                                                                                                         |
| Fixed Port                       | 1*1000Base-X uplink SFP fiber port (Data)<br>1*10/100/1000Base-T uplink RJ45 port (Data)<br>4*10/100/1000Base-T PoE ports (Data/ Power) |

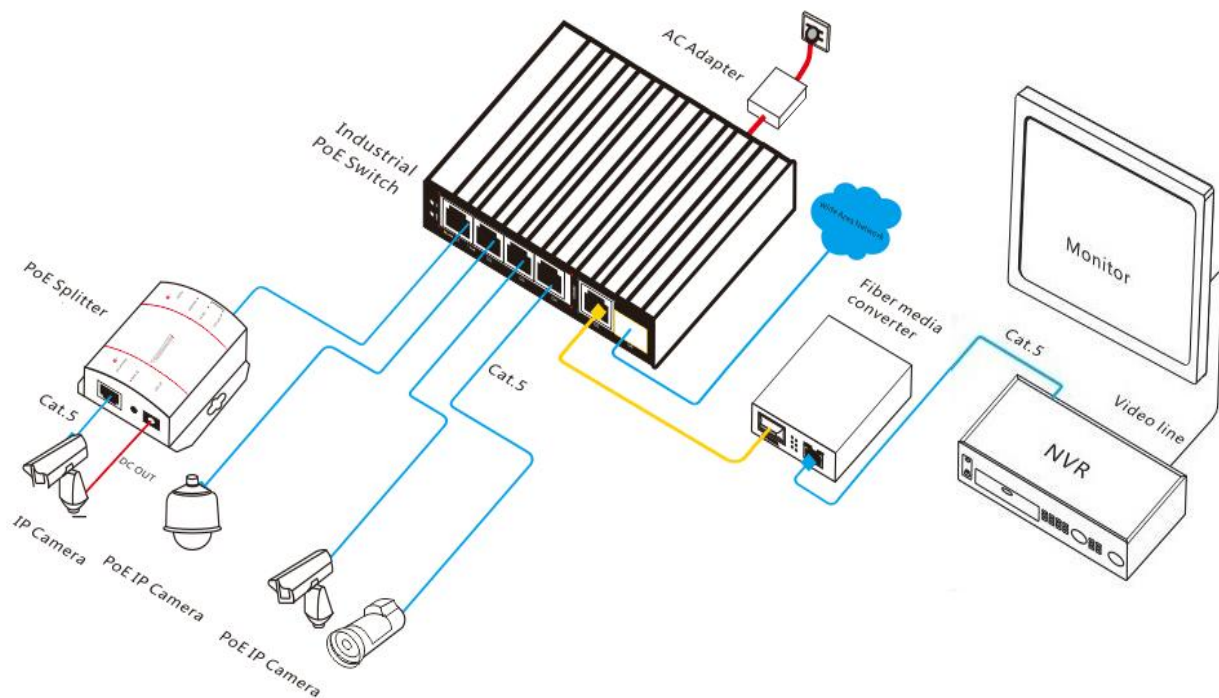
|                              |                                                                                                                                                          |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | 2 set V+, V- redundant DC power port (5P industrial Phoenix terminal)                                                                                    |
| Ethernet Port                | Ports 1-4 can support 10/100/1000Base-T(X) auto-sensing, full/ half duplex<br>MDI/ MDI-X self-adaption                                                   |
| Twisted Pair Transmission    | 10BASE-T: Cat3,4,5 UTP ( $\leq 100$ meters)<br>100BASE-TX: Cat5 or later UTP ( $\leq 100$ meters)<br>1000BASE-T: Cat5e or later UTP ( $\leq 100$ meters) |
| Optical Fiber Port           | Gigabit SFP fiber port; Does not include an 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                                                                                  |
| <b>Chip Parameter</b>        |                                                                                                                                                          |
| Network Protocol             | IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x                                |
| Forwarding Mode              | Store and forward (Full wire speed)                                                                                                                      |
| Switching Capacity           | 12Gbps (non-blocking)                                                                                                                                    |
| Forwarding Rate@64byte       | 8.93Mpps                                                                                                                                                 |
| MAC                          | 2K                                                                                                                                                       |
| Buffer Memory                | 2M                                                                                                                                                       |
| Jumbo Frames                 | 9.2K                                                                                                                                                     |
| LED Indicator                | Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: 6 (Green)                                                                      |
| <b>PoE&amp; Power Supply</b> |                                                                                                                                                          |
| PoE Port                     | Port 1-4                                                                                                                                                 |
| Power Supply Pin             | 1/2(+) 3/6 (-)                                                                                                                                           |
| Max Power Per Port           | 30W, IEEE802.3af/at                                                                                                                                      |
| Power Consumption            | Standby<5W, Full load<60W                                                                                                                                |
| Operation Voltage            | DC44-57V, 5P industrial Phoenix terminal supports anti-reverse protection.                                                                               |
| Power Supply                 | No, optional 48V/60W or 48V/120W industrial power supply                                                                                                 |
| <b>Physical Parameter</b>    |                                                                                                                                                          |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operation Temp/ Humidity           | -40~+80°C, 5%~90% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Storage Temp/ Humidity             | -40~+85°C, 5%~95% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Dimension                          | 119*100*30mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Net /Gross Weight                  | 0.4kg/ 0.5kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Installation                       | Desktop, 35mm DIN Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Certification&amp; Warranty</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Lightning Protection               | <p>IEC61000-4-3 (RS):10V/m (80~1000MHz)</p> <p>FCC Part 15/CISPR22 (EN55022): Class A</p> <p>IEC61000-6-2 (Common Industrial Standard)</p> <p>IEC61000-4-9 (Pulsed magnetic 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>Protection level: IP40, Lightning protection: 6KV 8/20us</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(150 kHz- 80 MHz)</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              | <p>IEC60068-2-6 (Anti Vibration), IEC60068-2-27 (Anti Shock),</p> <p>IEC60068-2-32 (Free Fall)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 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 |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| ONV-IPS33064PFG | Industrial PoE switch with 5*10/100/1000M RJ45 ports and 1*1000M uplink SFP fiber port. Ports 1-4 support the IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal 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 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   |

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

## POWER SUPPLY

| Product                                     | Model        | Description                                                                                                                                                       | Unit |
|---------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 60W DIN Rail<br>industrial power<br>supply  | GWS-DP60-48  | DIN Rail 60W single set of output power supply<br>Input voltage: AC100V~240V 50-60Hz, 1.6A<br>Output voltage: DC48V, 1.25A<br>Operation temperature: -40℃ to +70℃ | PC   |
| 120W DIN Rail<br>industrial power<br>supply | GWS-DP120-48 | DIN Rail 120W single set of output power supply<br>Input voltage: AC100V~240V 50-60Hz, 2.3A<br>Output voltage: DC48V, 2.5A<br>Operation temperature: -40℃ to +70℃ | PC   |

## RELATED PRODUCT

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

|                |                                                                                                                                                                                                                                                       |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | standard. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.                                                                                                                                           |
| ONV-IPS33042PF | Industrial PoE switch with 2*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Ports 1-2 support the IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.       |
| ONV-IPS33064P  | Industrial PoE switch with 6*10/100/1000M RJ45 ports. Ports 1-4 support the IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.                                          |
| ONV-IPS33064PF | Industrial PoE switch with 4*10/100/1000M RJ45 ports and 2*1000M 1000M uplink SFP fiber ports. Ports 1-4 support the IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting. |

## CONTACT US



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