

## Product Datasheet

# 9-port 2.5G Industrial PoE Fiber Switch

(ONV-IPS57008PF)



## OVERVIEW

The ONV-IPS57008PF is a 2.5G industrial PoE fiber switch independently developed by ONV. It has 8\*10/100/1000/2500Base-T adaptive RJ45 ports and 1\*1/2.5/10G uplink SFP+ fiber port. Port 1-8 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. It can supply power to PoE terminal equipment such as wireless AP, IP cameras, VoIP phones, and industrial sensors through a network cable, and meet the network environment that needs a 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 setting up a cost-effective and stable communication network. Unmanaged mode, plug and play, no configuration, easy to use.

## FEATURE

### ■ 2.5G access, 10G optical port uplink

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support 2.5G Ethernet port and 10G SFP+ 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.
- ◇ The PoE port supports the priority mechanism. When the remaining power is insufficient, the power of the high-priority port is given priority to avoid overloading of the device.
- ◇ 8\*10/100/1000/2500Base-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, and RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link, L/A, and PoE.
- ◇ Low power consumption, no fan, aluminum alloy shell, excellent heat dissipation to ensure the stable operation of the switch.

## TECHNICAL SPECIFICATION

Model	ONV-IPS57008PF
<b>Interface Characteristics</b>	
Fixed Port	1*1/2.5/10G uplink SFP+ fiber port (Data) 8*10/100/1000/2500Base-T PoE ports (Data/Power) 2 set of V+, V- redundant DC power ports (5 Pin Phoenix terminal)
Ethernet Port	Port 1-8 support 10/100/1000/2500Base-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 or later UTP (≤100 meters) 2500BASE-T: Cat6A or later UTP (≤100 meters)
Optical Fiber Port	1/10G SFP+ optical fiber port, default no include optical module (optional single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500m, 2.5G/10G /0-300m 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, IEEE802.3bz 2.5GBase-T, IEEE802.3ae 10GBase-SR/LR, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	60Gbps
Forwarding Rate@64byte	44.6Mpps
MAC	8K
Buffer Memory	8.1Mbit
Jumbo Frame	12Kbytes

LED Indicator	Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: L/A (Green)
<b>PoE &amp; Power Supply</b>	
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<13W, Full load af<120W, at<240W
Working Voltage	DC48-57V, 5 Pin industrial Phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 48V/120W or 48V/240W industrial power supply
<b>Physical Parameter</b>	
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)	145*134.5*47mm
Net /Gross Weight	0.8kg / 1.0kg
Installation	Desktop, 35mm DIN Rail
<b>Certification &amp; Warranty</b>	
Lightning Protection	Protection level: IP40 Lightning protection: 6KV 8/20us IEC61000-4-3 (RS):10V/m (80~1000MHz) FCC Part 15/CISPR22 (EN55022): Class B 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): CM 2.5kV, DM 1kV IEC61000-4-4(EFT): Power cable:±4kV, Data cable: ±2kV IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s

	IEC61000-4-2 (ESD): $\pm 8\text{kV}$ contact discharge, $\pm 15\text{kV}$ air discharge IEC61000-4-6 (Radio frequency transmission): $10\text{V}$ ( $150\text{kHz}\sim 80\text{MHz}$ ) IEC61000-4-8 (Power frequency magnetic field): $100\text{A/m}$ , $1000\text{A/m}$ , $1\text{s}\sim 3\text{s}$ IEC61000-4-5 (Surge): Power cable: $\text{CM}\pm 4\text{kV}$ / $\text{DM}\pm 2\text{kV}$ , Data cable: $\pm 4\text{kV}$
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 B, RoHS
Warranty	5 years, lifelong maintenance.

## DIMENSION

## APPLICATION

## ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS57008PF	Unmanaged industrial PoE fiber switch with 8*10/100/1000/2500M RJ45 ports and 1*1/2.5/10G uplink SFP+ fiber port. Port 1-8 can support IEEE 802.3 af/at PoE standard. It support dual DC power supply input and DIN rail mounting.	120W/240W

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

## PACKING LIST

Packing List	Content	Qty	Unit
	9-port 2.5G industrial PoE switch	1	SET
	User Guide	1	PC
	Warranty Card	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, support DDM function, support hot plug and pull.	PC
	2632-G	Industrial SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	2612-T-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	2613-R-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	2612-T-SC-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
	2613-R-SC-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
10G	6630-G	Industrial SFP+ optical module, 10G multi-mode dual fiber	PC

Optical Module		850nm, transmission distance: 300m, LC interface, support DDM function, support hot plug and pull.	
	7832-G	Industrial SFP+ optical module, 10G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	7832-33-G	Industrial SFP+ optical module, 10G single-mode single fiber TX1330nm/ RX1270nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	7832-27-G	Industrial SFP+ optical module, 10G single-mode single fiber TX1270nm/ RX13300nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC

## POWER SUPPLY

Product	Model	Description	Unit
130W Desktop Power Adapter	GWS-AP130-52	Desktop 130W single set of output power adapter Input Voltage: AC100V-240V 50-60Hz, 2.3A Output Voltage: DC52V, 2.5A Operation Temperature: -20°C to +65°C	PC
250W Desktop Power Adapter	GWS-AP250-52	Desktop 250W single set of output power adapter Input Voltage: AC100V-240V 50-60Hz, 4.1A Output Voltage: DC52V, 4.8A Operation Temperature: -20°C to +65°C	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, 1.5A Output Voltage: DC48V, 2.5A Operation Temperature: -40°C to +70°C	PC
240W DIN Rail Industrial Power	GWS-DP240-48	DIN Rail 240W single set of output power supply Input Voltage: AC100V-240V 50-60Hz, 3.0A	PC



Supply	Output Voltage: DC48V, 5A
	Operation Temperature: -40°C to +70°C

## CONTACT US



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

Tel: 0086-755-33376606

Fax: 0086-755-33376608

WeChat: ONV-PoE-IoT

Email: [onv@onv.com.cn](mailto:onv@onv.com.cn)

Skype: [onv@onv.com.cn](https://www.skype.com/people/onv@onv.com.cn)

Website: [www.onvcom.com](http://www.onvcom.com)

Headquarter Address: Room 1003, Block D, Terra Building, Futian District, Shenzhen

Factory Address: Floor 4-6, Building A, Senyutai Industrial Park, No. 111, Huaning Road,

Xinshi Community, Dalang Street, Longhua District, Shenzhen

