Product Datasheet

9-port 2.5G Industrial PoE Switch
(ONV-IPS57008PF)

OVERVIEW

The ONV-IPS57008PF is a 2.5G industrial PoE 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 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 cameras, VoIP phones, and industrial sensors through a network cable. It also meets the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, electric power, mining, metallurgy, green energy, and 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, uplink 1/2.5/10G SFP+ fiber port**

+86 755 33376606

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 2.5G RJ45 port and 1/2.5/10G 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.

◇ 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, RoHS.

◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link, L/A, and PoE.

◇ Low power consumption, aluminum alloy housing, and excellent heat dissipation to ensure stable operation of the switch.

TECHNICAL SPECIFICATION

Model	ONV-IPS57008PF
Interface Characteristics	
Fixed Port	1*1/2.5/10G uplink SFP+ fiber port (Data) 8*10/100/1000/2500Base-T PoE ports (Data/Power) 2 set V+, V- redundant DC power ports (5P industrial Phoenix terminal)
Ethernet Port	Port 1-8 can support 10/100/1000/2500Base-T auto-sensing, full/ half

+86 755 33376606

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

ONV

	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/ 0-550m, 850nm/ 0-300m (10G), 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 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3bz 2.5GBase-T, IEEE 802.3ae 10GBase-SR/LR, IEEE 802.3x
Forwarding Mode	Store and forward (Full wire speed)
Switching Capacity	60Gbps (non-blocking)
Forwarding Rate@64byte	44.6Mpps
MAC	4K
Buffer Memory	8.1M
Jumbo Frame	12K
LED Indicator	Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: L/A (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<13W, 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

+86 755 33376606

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

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
Certification& Warranty	
Lightning Protection	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
	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 (Free Fall)
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS
Warranty	5 years, lifelong maintenance.

DIMENSION

APPLICATION

ONV

ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS57008PF	Unmanaged industrial PoE 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 can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.	120W/240W

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

PACKING LIST

Packing List	Content	Qty	Unit
	9-port 2.5G 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

+86 755 33376606

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

ONV

		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
10G Optical Module	6630-G	Industrial SFP+ optical module, 10G multi-mode dual fiber 850nm, transmission distance: 300m, LC interface, supports DDM function and hot plugging.	PC
	7832-G	Industrial SFP+ optical module, 10G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC
	7832-33-G	Industrial SFP+ optical module, 10G single-mode single fiber TX1330nm/ RX1270nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC
	7832-27-G	Industrial SFP+ optical module, 10G single-mode single fiber TX1270nm/ RX1330nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC

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	PC

+86 755 33376606
Optical Network Video Technologies (Shenzhen) Co., Ltd.

ONV

8		Operation Temperature: -40℃ to +70℃	
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

CONTACT US

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

Tel: 0086-755-33376606

Fax: 0086-755-33376608

Email: onv@onv.com.cn

Skype: onv@onv.com.cn

WeChat ID: ONV-PoE-IoT

Website: www.onvcom.com

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

Factory Address: Building B3, Galaxy Artificial Intelligence Industrial Park, No. 333, Zhongkai 6th Road, Chenjiang Street, Zhongkai High-tech Zone, Huizhou