

Product Datasheet

2-port Gigabit Industrial PoE Switch

(ONV-IPS33021PFS)



OVERVIEW

The ONV-IPS33021PFS is a gigabit industrial PoE fiber switch independently developed by ONV. It has 1*10/100/1000Base-T RJ45 port and 1*1000Base-X uplink SC fiber port. Port 1 can support IEEE 802.3 af/at PoE standard and single-port PoE power is 30W. As a PoE power supply device, it can automatically detect and recognize power-compliant devices that meet 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, maritime, metallurgy, and industrial scenarios such as green energy construction to build cost-effective, stable, and reliable communication networks. Unmanaged model, plug and play, no configuration required, simple and convenient to use.

FEATURE

■ Gigabit line speed access, uplink SC port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Gigabit RJ45 port and uplink SC fiber port to meet the networking requirements 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.
- ◇ 1*10/100/1000Base-T RJ45 port supports PoE power to meet the PoE power supply needs of various scenarios in the industrial field.
- ◇ Priority system for the PoE port will supply power to the high-priority level port first when the power budget is insufficient and avoid overwork of the device.

■ 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, no fan, aluminum alloy metal housing, and excellent heat dissipation to ensure the stable operation of the switch.

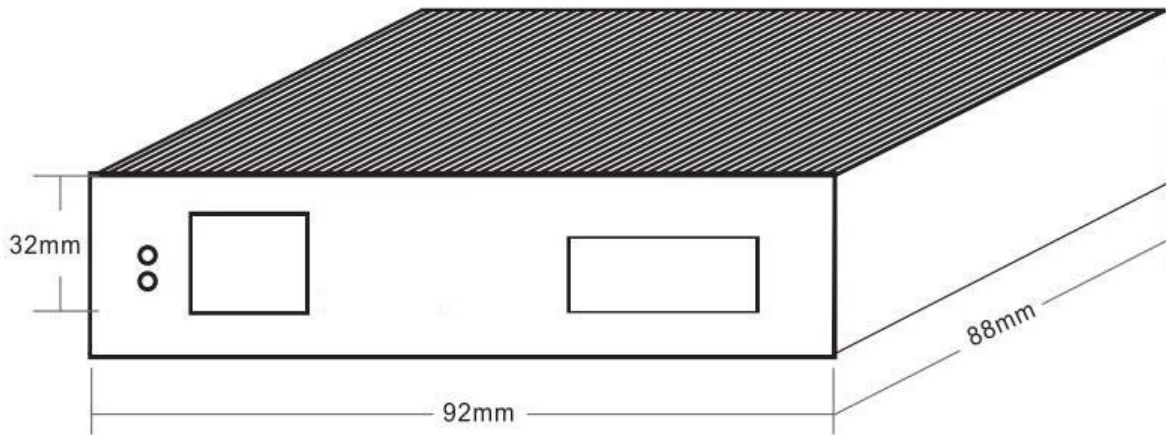
TECHNICAL SPECIFICATION

Model	ONV-IPS33021PFS	ONV-IPS33032PFS
Interface Characteristics		
Fixed Port	1*10/100/1000Base-T PoE port (Data/ Power) 1*1000Base-X SC fiber port (Data) 2 sets V+, V- redundant DC power	2*10/100/1000Base-T PoE ports (Data/ Power) 1*1000Base-X SC fiber port (Data) 2 sets V+, V- redundant DC power

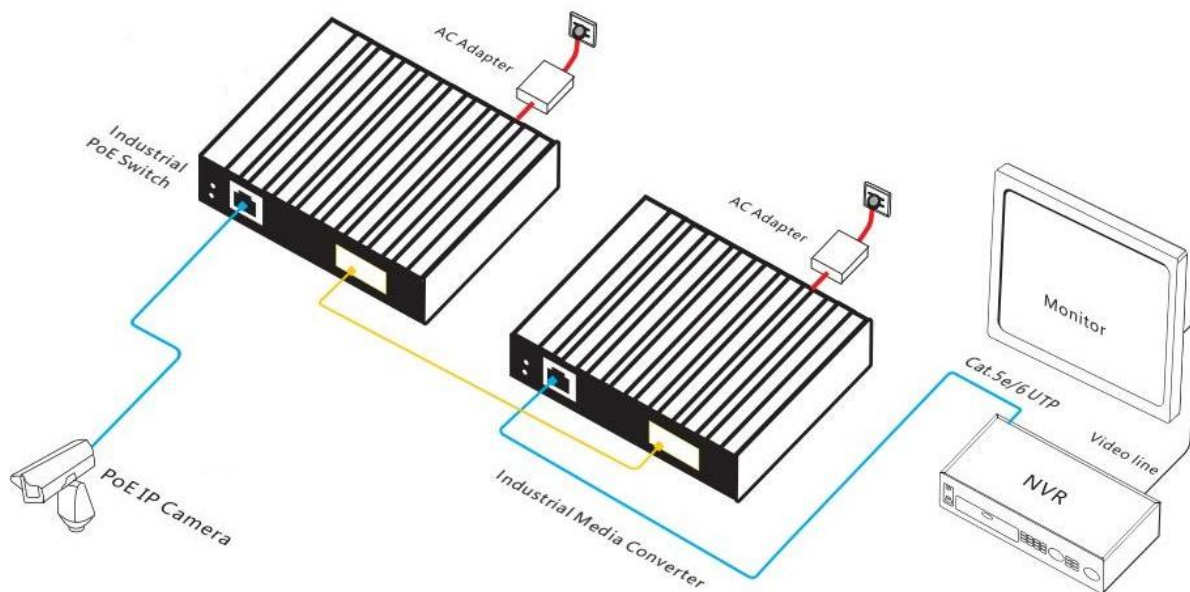
	port (3P Phoenix terminal)	port (3P Phoenix terminal)
Ethernet Port	Port 1/ 1-2 support 10/100/1000Base-T(X) auto-sensing, full/ half duplex MDI/ MDI-X self-adaption	
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter) 1000BASE-T: Cat5e or later UTP (≤100 meter)	
Optical Fiber Port	Gigabit single-mode dual fiber SC optical module. (optional single-mode single fiber/ multi-mode dual fiber optical module)	
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, 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 802.3x	
Forwarding Mode	Store and Forward (Full Wire Speed)	
Switching Capacity	12Gbps (non-blocking)	
Forwarding Rate @64byte	2.98Mpps	4.46Mpps
MAC	2K	
Buffer Memory	2M	
Jumbo Frame	9.2K	
LED Indicator	Power: PWR (Green), Network: Link, Link/Act (Yellow), PoE: PoE (Green)	
PoE & Power Supply		
PoE Port	Port 1	Port 1-2
Power Supply Pin	1/2 (+) 3/6 (-)	
Power Consumption	Standby<4W, Full load<32W	Standby<5W, Full load<60W
Operating Voltage	DC48-57V, 3P industrial Phoenix terminal, support anti-reverse protection.	
Power Supply	No, optional 48V/36W or 48V/60W industrial power supply	
Physical Parameter		
Operation Temp/	-40~+75°C, 5%~90% RH Non condensing	

Humidity	
Storage Temp/ Humidity	-40~+85°C, 5%~95% RH Non condensing
Dimension	92*88*32mm
Net /Gross Weight	0.3kg / 0.4kg
Installation	Desktop, 35mm DIN Rail
Certification & Warranty	
Lightning Protection	<p>Protection level: IP40</p> <p>Lightning protection: 6KV 8/20us</p> <p>IEC61000-4-3 (RS):10V/m (80~1000MHz)</p> <p>FCC Part 15/CISPR22 (EN55022): Class B</p> <p>IEC61000-6-2 (Common Industrial Standard)</p> <p>IEC61000-4-9 (Pulsed magnet field): 1000A/m</p> <p>IEC61000-4-10 (Damped oscillation): 30A/m, 1MHz</p> <p>IEC61000-4-12/18 (Shockwave): CM 2.5kV, DM 1kV</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(150kHz~80MHz)</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	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-IPS33021PFS	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink single-mode dual fiber SC optical module (1310nm/20km). Port 1 can support	24W/36W

	IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	
ONV-IPS33021PFS-M	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink multi-mode dual fiber SC optical module (850nm/550m). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	24W/36W
ONV-IPS33021PFS-A	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink single-mode single fiber SC optical module (1310nm/20km or 1550nm/20km). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	24W/36W
ONV-IPS33021PFS-B	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink single-mode single fiber SC optical module (1550nm/20km or 1310nm/20km). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	24W/36W
ONV-IPS33032PFS	Unmanaged industrial PoE switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink single-mode dual fiber SC optical module (1310nm/20km). Port 1-2 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	36W/60W
ONV-IPS33032PFS-M	Unmanaged industrial PoE switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink multi-mode dual fiber SC optical module (850nm/550m). Port 1-2 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	36W/60W

ONV-IPS33032PFS-A	Unmanaged industrial PoE switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink single-mode single fiber SC optical module (1310nm/20km or 1550nm/20km). Port 1-2 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	36W/60W
ONV-IPS33032PFS-B	Unmanaged industrial PoE switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink single-mode single fiber SC optical module (1550nm/20km or 1310nm/20km). Port 1-2 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	36W/60W

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

PACKING LIST

	Content	Qty	Unit
Packing List	2-port gigabit industrial PoE switch	1	SET
	User Guide	1	PC
	Warranty Card and Certificate of Conformity	1	PC

POWER SUPPLY

Product	Model	Description	Unit
36W Desktop Power Adapter	GWS-AP36-52	Desktop 36W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 0.56A Output Voltage: DC52V, 0.7A Operation Temperature: -20°C to +65°C	PC
65W Desktop Power Adapter	GWS-AP65-52	Desktop 65W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 1.1A	PC

		Output Voltage: DC52V, 1.25A Operation Temperature: -20°C to +65°C	
36W DIN Rail Industrial Power Supply	GWS-DP36-48	Din Rail 36W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 0.56A Output Voltage: DC48V, 0.75A Operation Temperature: -40°C to +70°C	PC
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°C to +70°C	PC

RELATED PRODUCT

Model	Description
ONV-IPS33042PF	Unmanaged industrial PoE fiber switch with 2*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-2 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33064PF	Unmanaged industrial PoE fiber switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33064PFG	Unmanaged industrial PoE fiber switch with 5*10/100/1000M RJ45 ports and 1*1000M uplink SFP fiber port. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33108PF	Unmanaged industrial PoE fiber switch with 8*10/100/1000M RJ45 ports 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 and and DIN

rail mounting.

CONTACT US

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

Tel: 0086-755-33376606

Fax: 0086-755-33376608

WeChat: ONV-PoE-IoT

Email: onv@onv.com.cn

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

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

