

Product Datasheet

2-port Gigabit Industrial PoE Switch

(ONV-IPS3021PF)



OVERVIEW

The ONV-IPS3021PF is a Gigabit industrial PoE fiber switch independently developed by ONV. It has 1*10/100/1000Base-T adaptive RJ45 port and 1*1.25G uplink SC fiber port. Port 1 supports the IEEE 802.3af/at PoE standard, with 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. The network cable can supply power to PoE terminal devices such as wireless APs, IP cameras, and industrial sensors. It also meets the needs of network environments that require a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, the power industry, mining, petroleum, and sea transportation. Industrial scenes such as metallurgy, green energy, and construction form a cost-effective, stable, and reliable communication network. Plug-and-play and easy to use.

FEATURE

■ Gigabit access, uplink SC fiber port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Supports a combination of Gigabit RJ45 port and 1.25G SC fiber port, which allows users to

flexibly build networks and meet the networking needs of various scenarios.

■ Smart PoE power supply

- ◇ Complies with IEEE 802.3 af/at PoE standard, automatically identifies PoE devices for power supply, and does not damage non-PoE devices.
- ◇ 1*10/100/1000Base-T RJ45 port can support PoE power supply to meet the needs of PoE power supply in various scenarios in the industrial field.

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

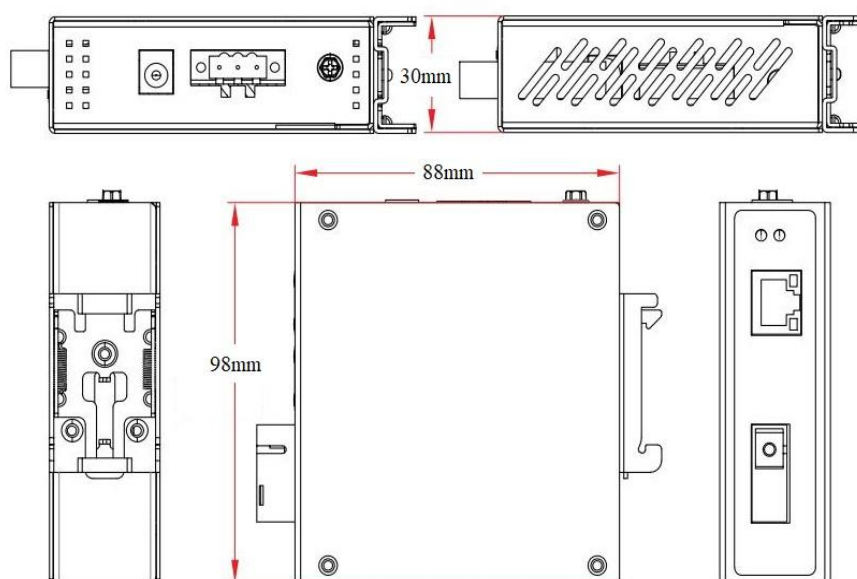
TECHNICAL SPECIFICATION

Model	ONV-IPS3021PF	ONV-IPS3021PF-A	ONV-IPS3021PF-B
Interface Characteristics			
Fixed Port	1*DC5521 power socket 1*1.25G uplink SC fiber port (Data) 1*10/100/1000Base-T PoE port (Data/ Power) 1 V+, V- (3P Phoenix terminal) DC power interface Dual power interfaces support reverse-connection protection.		
Ethernet Port	Port 1 supports 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 or later UTP (≤100 meters)		
Optical Fiber Port	Single-mode dual-fiber	Single-mode single-fiber, 20km, SC port	

	20km, SC port		
Optical Cable/ Distance	20km, 1310nm	20km,TX1310nm/ RX1550nm	20km, TX1550nm/ RX1310nm
Chip Parameter			
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	2.98Mpps		
MAC	2K		
Buffer Memory	2M		
Jumbo Frame	9216bytes		
LED Indicator	Power: PWR (Green), Network: Link (Yellow), PoE: PoE (Green), Fiber port: 2 (Green)		
PoE& Power Supply			
PoE Port	Port 1		
Power Supply Pin	1/2(+) 3/6 (-)		
Max Power Per Port	30W, IEEE 802.3 af/at		
Power Consumption	Standby<3W, full load af<15, at<30W		
Operation Voltage	DC44-56V		
Power Supply	No, optional 48V/36W industrial power supply		
Physical Parameter			
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)	98*88*30mm		
Net /Gross Weight	0.25kg/ 0.35kg		
Installation	Desktop, 35mm DIN Rail		
Certification& Warranty			
Lightning Protection	IEC61000-4-3 (RS):10V/m (80~1000MHz)		

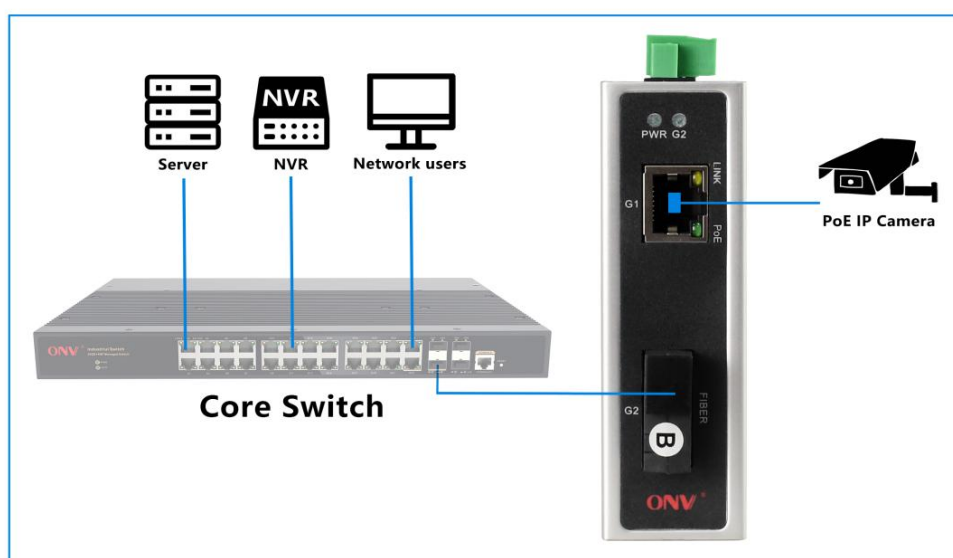
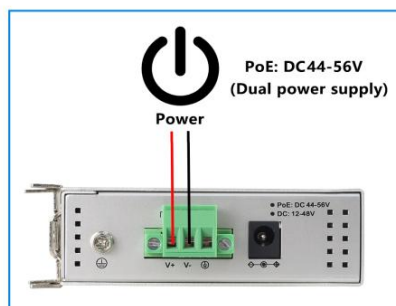
	FCC Part 15/CISPR22 (EN55022): Class A IEC61000-6-2 (Common Industrial Standard) IEC61000-4-9 (Pulsed magnetic field): 1000A/m IEC61000-4-10 (Damped oscillation): 30A/m 1MHz IEC61000-4-12/18 (Shockwave): CM2.5kV, DM1kV Protection level: IP30, Lightning protection: 6KV 8/20us IEC61000-4-4(EFT): Power cable: ± 4 kV, data cable: ± 2 kV IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s IEC61000-4-2 (ESD): ± 8kV contact discharge, ± 15kV air discharge IEC61000-4-6 (Radio frequency transmission): 10V(150 kHz- 80 MHz) 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	IEC 60068-2-6 (Anti vibration), IEC 60068-2-32 (Free fall), IEC 60068-2-27 (Anti shock)
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS
Warranty	5 years, lifelong maintenance.

DIMENSION



APPLICATION

-  **Plug and play**
-  **Wide temperature range**
-  **DIN Rail installation**



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS3021PF	Industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1.25G uplink SC fiber port (1310nm/ 20km single-mode dual-fiber optical module). Port 1 supports the IEEE 802.3 af/at PoE standard. It supports dual DC power input and DIN rail mounting.	36W
ONV-IPS3021PF-A	Industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1.25G uplink SC fiber port (1310nm/ 20km single-mode single-fiber optical module). Port 1 supports the IEEE 802.3 af/at PoE standard. It supports dual DC power input and	36W

	DIN rail mounting.	
ONV-IPS3021PF-B	Industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1.25G uplink SC fiber port (1550nm/ 20km single-mode single-fiber optical module). Port 1 supports the IEEE 802.3 af/at PoE standard. It supports dual DC power input and DIN rail mounting.	36W

Note: The power supply is not included and needs to be purchased.

PACKING LIST

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

POWER SUPPLY

Product	Model	Description	Unit
36W DIN Rail industrial power supply	GWS-DP36-48	DIN Rail 36W single-set output power supply Input voltage: AC100V~240V 50-60Hz, 0.56A Output voltage: DC48V, 0.75A Operation temperature: -40℃ to +70℃	PC

CONTACT US



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

Tel: 0086-755-33376606

Fax: 0086-755-33376608

Email: onv@onv.com.cn

WeChat ID: ONV-PoE-IoT

Website: www.onvcom.com, www.onvswitch.com

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

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

