

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*1000Base-X uplink SC fiber port. Port 1 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 devices such as wireless AP, IP cameras, and industrial sensors through the network cable, and meet the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, power industry, mining, petroleum, and sea transportation. Industrial scenes such as metallurgy and green energy, construction form a cost-effective, stable, and reliable communication network. Unmanaged model, plug and play, no configuration, 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.
- ◇ Support Gigabit RJ45 port and SC 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.
- ◇ 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

- ◇ 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 shell, and excellent heat dissipation to ensure the stable operation of the switch.

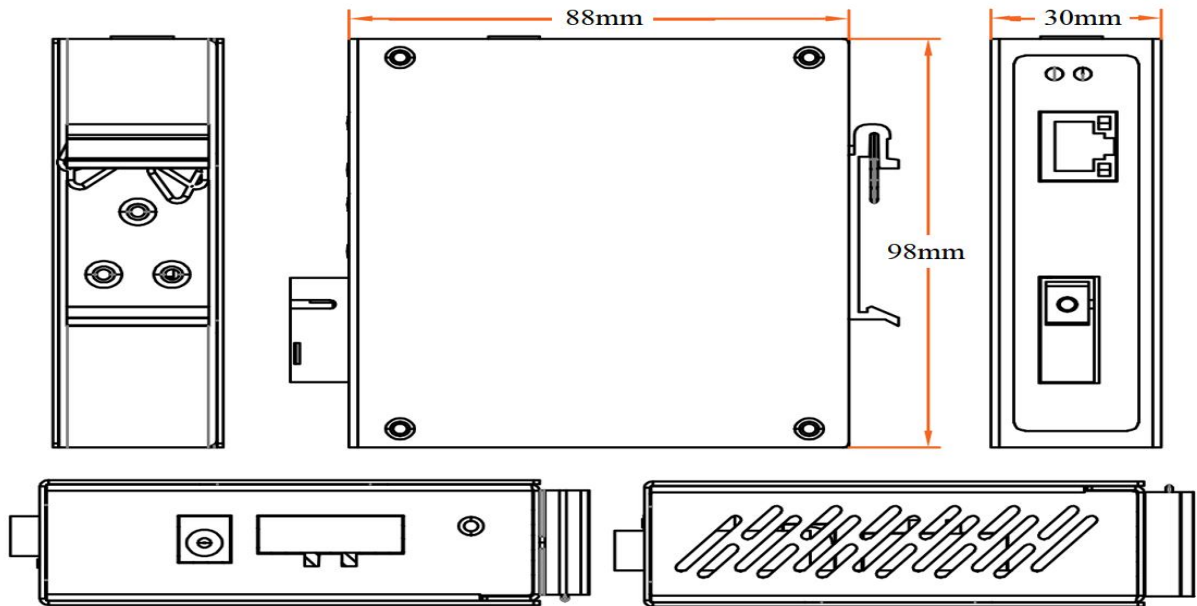
TECHNICAL SPECIFICATION

Model	ONV-IPS3021PF
Interface Characteristics	
Fixed Port	1*DC5521 power socket 1*1000Base-X uplink SC fiber port (Data) 1*10/100/1000Base-T PoE ports (Data/ Power) 2 sets V+, V- redundant DC power port (3P Phoenix terminal)
Ethernet Port	Port 1 can 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 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	Optical module is single-mode dual fiber 20km, SC port
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, 1310nm/ 0-2km, 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	8.93Mpps
MAC	2K
Buffer Memory	2M
Jumbo Frame	9216B
LED Indicator	Power: PWR (Green), PoE: PoE (Green), Fiber port: G2(Green), Network: Link (Yellow)
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<1W, Full load af<15, at<30W
Operating Voltage	DC44-56V, 3P industrial Phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 36W/48V industrial power supply
Physical Parameter	
Operation TEMP/ Humidity	-40~+75°C, 5%~90% RH Non condensing

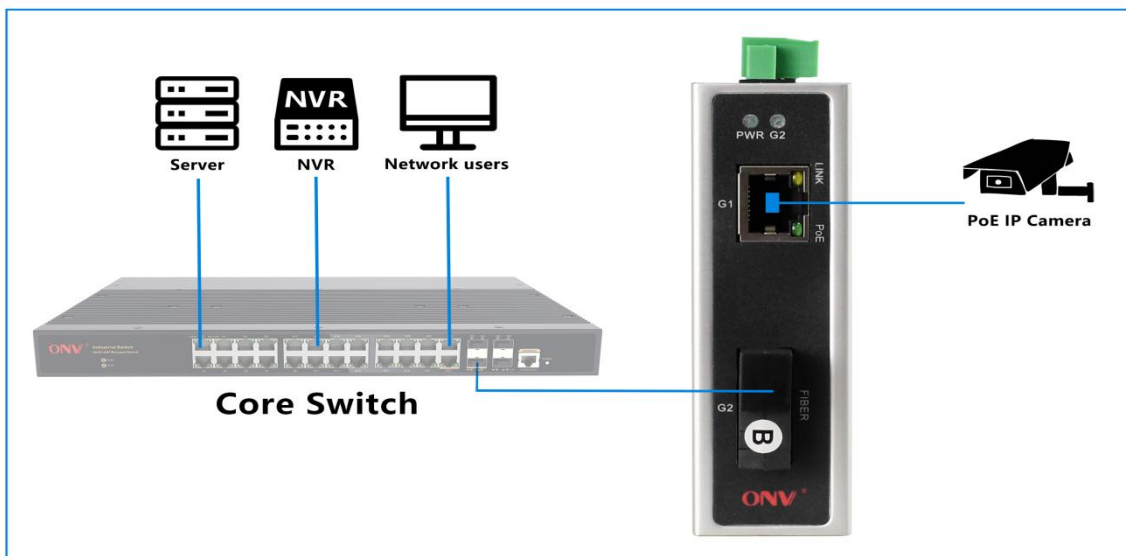
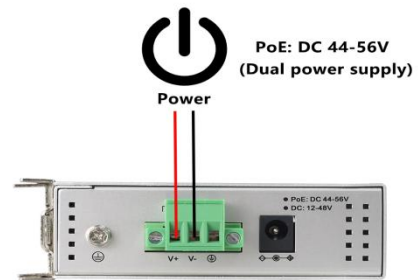
Storage TEMP/ Humidity	-40~+85°C, 5%~95% RH Non condensing
Dimension (L*W*H)	98*88*30mm
Net /Gross Weight	0.25kg/ 0.35kg
Installation	Desktop, 35mm DIN Rail
Certification & Warranty	
Lightning Protection	Protection level: IP30
	Lightning protection: 6KV 8/20us
	IEC61000-4-3 (RS):10V/m (80~1000MHz)
	FCC 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): CM2.5kV, DM1kV
	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), IEC60068-2-32 (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

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



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS3021PF	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink SC fiber port (1310nm /20km single-mode dual fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	48V/36W
ONV-IPS3021PF-A	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink SC fiber port (1310nm /20km single-mode single fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	48V/36W
ONV-IPS3021PF-B	Unmanaged industrial PoE switch with 1*10/100/1000M RJ45 port and 1*1000M uplink SC fiber port (1550nm /20km single-mode single fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	48V/36W

Note: The power supply is not included and needs 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
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

CONTACT US

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