

Product Datasheet

2-port 10/100M Industrial PoE Switch

(ONV-IPS31021PFS)



OVERVIEW

The ONV-IPS31021PFS is a 10/100M industrial PoE fiber switch independently developed by ONV. It has 1*10/100M RJ45 port and 1*155M 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 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 mode, plug and play, no configuration, easy to use.

FEATURE

- **10/100M access**
- ◇ Support non-blocking wire-speed forwarding.

- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support 10/100M RJ45 port and 155M 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*10/100Base-TX RJ45 port supports PoE power to meet the PoE power supply needs of 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, aluminum alloy housing, and excellent heat dissipation to ensure the stable operation of the switch.

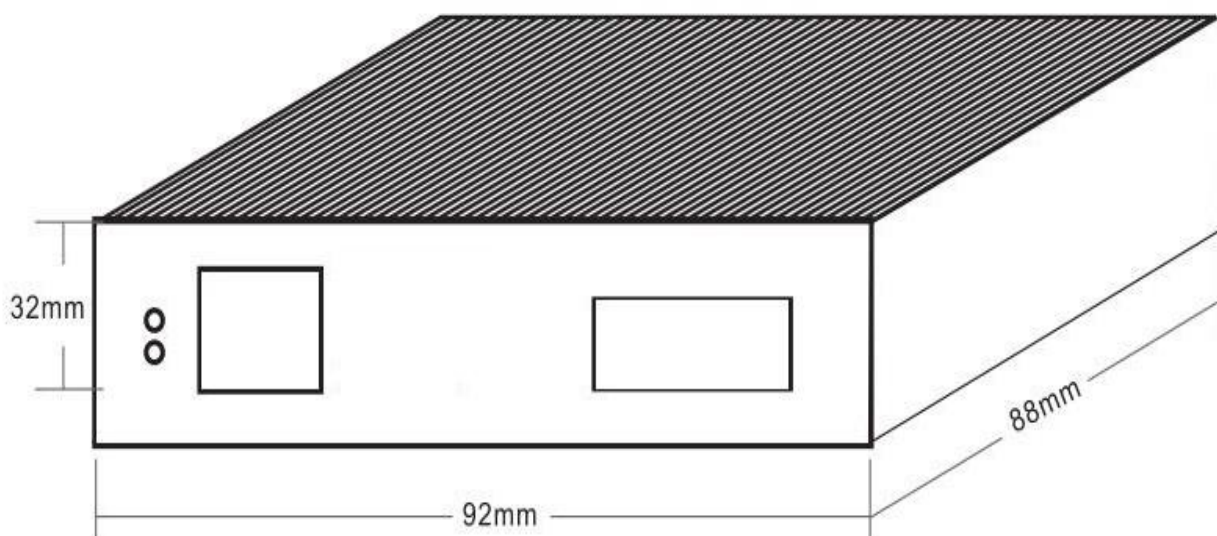
TECHNICAL SPECIFICATION

Model	ONV-IPS31021PFS
Interface Characteristics	
Fixed Port	1*155M uplink SC fiber port (Data) 1*10/100Base-TX PoE port (Data/ Power) 2 set V+, V- redundant DC power port (5P industrial Phoenix terminal)
Ethernet Port	Port 1 can support 10/100Base-TX 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)
Optical Fiber Port	Single-mode dual fiber 20km, SC port. (optional single-mode single fiber/ multi-mode dual fiber optical module)

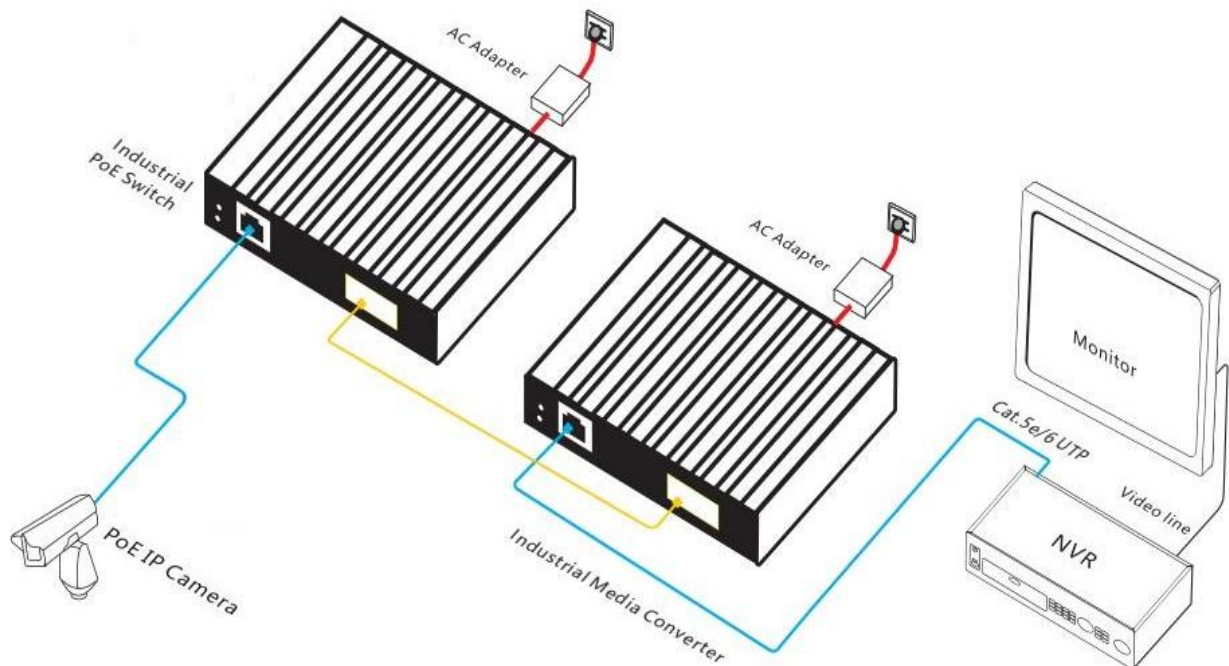
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, 1310nm/ 0-2km, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km
Chip Parameter	
Network Protocol	IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3u 100Base-FX, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	1.0bps (non-blocking)
Forwarding Rate @64byte	0.3Mpps
MAC	1K
Buffer Memory	512K
Jumbo Frame	1536bytes
LED Indicator	PoE: PoE (Green), Fiber port: FX (Green), Power: PWR (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<3W, Full load af<15, at<30W
Input Voltage/ Interface	DC48-57V, 5P industrial Phoenix terminal, support anti-reverse protection.
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)	92*88*32mm
Net /Gross Weight	0.3kg /0.4kg
Installation	Desktop, 35mm DIN Rail
Certification & Warranty	
Lightning Protection	Protection level: IP40 Lightning protection: 6KV 8/20us

	<p>IEC61000-4-3 (RS):10V/m (80~1000MHz)</p> <p>FCC Part 15/CISPR22 (EN55022): Class A</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	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS
Warranty	5 years, lifelong maintenance.

DIMENSION



APPLICATION



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS31021PFS	Unmanaged industrial PoE switch with 1*10/100M RJ45 port and 1*155M 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 redundant power input and DIN rail mounting.	36W
ONV-IPS31021PFS-M	Unmanaged industrial PoE switch with 1*10/100M RJ45 port and 1*155M uplink SC fiber port (850nm/550m or 1310nm/2km multi-mode dual fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.	36W

ONV-IPS31021PFS-A	Unmanaged industrial PoE switch with 1*10/100M RJ45 port and 1*155M 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 redundant power input and DIN rail mounting.	36W
ONV-IPS31021PFS-B	Unmanaged industrial PoE switch with 1*10/100M RJ45 port and 1*155M uplink SC fiber port (1550nm/20km or 1310nm/20km single-mode single fiber optical module). Port 1 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant 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
	3-port 10/100M industrial PoE switch	1	Set
	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 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

RELATED PRODUCT

Model	Description
ONV-IPS31032PF	Unmanaged industrial PoE switch with 2*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm/20km single-mode dual fiber optical module). Port 1-2 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.
ONV-IPS31004PF	Unmanaged industrial PoE switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm/20km single-mode dual fiber optical module). Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.
ONV-IPS31064PF	Unmanaged industrial PoE switch with 4*10/100M RJ45 ports and 2*155M 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 DIN rail mounting.
ONV-IPS31084PF	Unmanaged industrial PoE switch with 6*10/100M RJ45 ports and 2*155M uplink SC fiber ports (1310nm/20km single-mode dual fiber optical module). Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input and DIN rail mounting.
ONV-IPS31128PFB	Unmanaged industrial PoE switch with 8*10/100M RJ45 ports and 2*10/100/100M 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 DIN rail mounting.

CONTACT US



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