

## Product Datasheet

# 8-port 10/100M industrial PoE Fiber Switch (ONV-IPS31084PF)



## OVERVIEW

The ONV-IPS31084PF is a 10/100M industrial PoE fiber switch independently developed by ONV. It has 6\*10/100M adaptive RJ45 ports and 2\*155M uplink SC fiber ports. Port 1-4 can support IEEE 802.3 af/at PoE standard and single-port PoE power reaches 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, industrial sensors through a network cable, and meet the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, electric power, mining, metallurgy, and green energy, 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

### ■ 10/100M RJ45 and SC port, fast Ethernet

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x 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.
- ◇ 4\*10/100Base-TX RJ45 port support PoE power supply to meet the needs of PoE power supply in various scenarios in the industrial field.
- ◇ Priority system for PoE port, it 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.
- ◇ Low power consumption, no fan, aluminum shell, and excellent heat dissipation to ensure the stable operation of the switch.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link, and PoE.

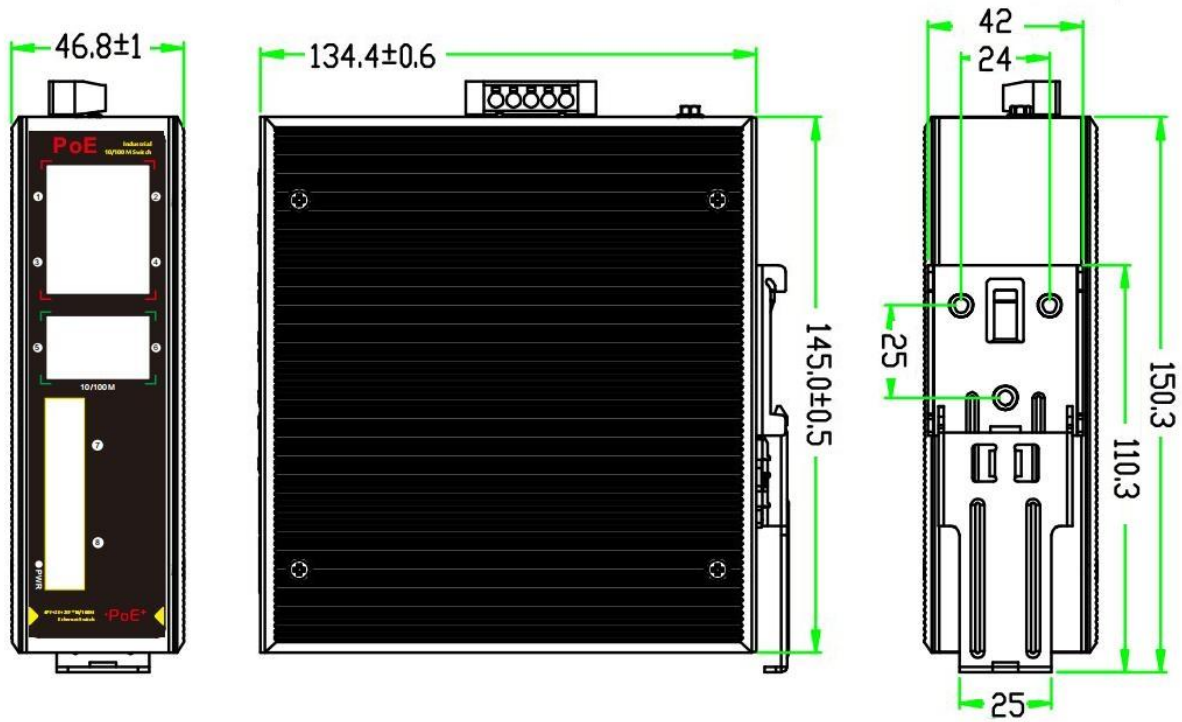
## TECHNICAL SPECIFICATION

Model	ONV-IPS31084PF
<b>Interface Characteristics</b>	
Fixed Port	2*10/100Base-TX RJ45 ports(Data) 2*155M uplink SC fiber ports (Data) 4*10/100Base-TX PoE ports (Data/ Power) 2 set of V+, V- redundant DC power ports (5P Phoenix terminal)

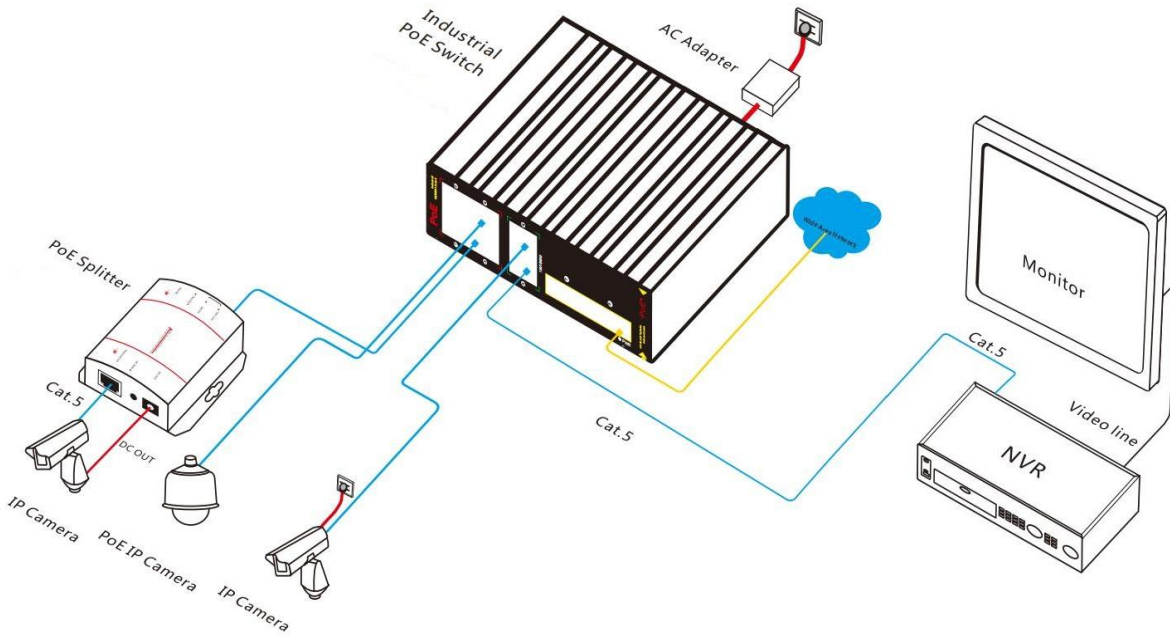
Ethernet Port	Port 1-4 support 10/100Base-TX auto-sensing, full/ half duplex MDI/ MDI-X self-adaption
Twisted Pair	10BASE-T: Cat3,4,5 UTP (≤100 meters)
Transmission	1000BASE-T: Cat5e or later UTP (≤100 meters)
SC Slot Port	Default single-mode dual fiber optical module 20km, SC port. (optional multi-mode dual fiber and single-mode single fiber optical module)
Optical Cable	Multi-mode: 850nm/ 0-550m, 1310nm/ 0-2km Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km
<b>Chip Parameter</b>	
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	1.6Gbps (non-blocking)
Forwarding Rate@64byte	1.19Mpps
MAC	1K
Buffer Memory	768K
Jumbo Frame	1632byte
LED Indicator	POE: PoE (Green), Fiber port: L/A (Green) Power: PWR (Green), Network: Link (Yellow)
<b>PoE &amp; Power Supply</b>	
PoE Port	Port 1-4
Power Supply Pin	1/2 (+) 3/6 (-)
Max Power Per Port	30W; IEEE 802.3 af/at
Power Consumption	Standby<6W, Full load af<60W, at<120W
Working Voltage	DC48-57V, 5P industrial Phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 48V/60W or 48V/120W industrial power supply
<b>Physical Parameter</b>	

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	0.7kg / 0.9kg
Installation	Desktop, 35mm DIN Rail
<b>Certification &amp; Warranty</b>	
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), IEC60068-2-27 (Anti Shock), IEC60068-2-32 (Free Fall)
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-IPS31084PF	Unmanaged industrial PoE fiber 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.	60W/120W
ONV-IPS31084PF-M	Unmanaged industrial PoE fiber switch with 6*10/100M RJ45 ports and 2*155M uplink SC fiber ports (850nm/0.5km or 1310nm/2km multi-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.	60W/120W
ONV-IPS31084PF-A	Unmanaged industrial PoE fiber switch with 6*10/100M RJ45 ports and 2*155M uplink SC fiber ports (1310nm/20km single-mode single 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.	60W/120W
ONV-IPS31084PF-B	Unmanaged industrial PoE fiber switch with 6*10/100M RJ45 ports and 2*155M uplink SC fiber ports (1550nm/20km single-mode single 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.	60W/120W

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

## PACKING LIST

	Content	Qty	Unit
Packing List	8-port 10/100M industrial PoE fiber switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

## POWER SUPPLY

Product	Model	Description	Unit
65W Desktop Power Adapter	GWS-AP65-52	Desktop 65W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 1.1A Output Voltage: DC52V, 1.25A Operation Temperature: -20°C to +65°C	PC
110W Desktop Power Adapter	GWS-AP110-52	Desktop 110W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 2.0A Output Voltage: DC52V, 2.0A Operation Temperature: -20°C to +65°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
120W DIN Rail Industrial Power Supply	GWS-DP120-48	DIN Rail 120W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 1.5A Output Voltage: DC48V, 2.5A Operation Temperature: -40°C to +70°C	PC

## RELATED PRODUCT

Model	Description
ONV-IPS31032PF	Unmanaged industrial PoE fiber switch with 2*10/100M RJ45 ports and 1*155M uplink SC fiber port. 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 fiber switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port. 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 fiber switch with 8*10/100M PoE ports and 2*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 DIN rail mounting.

## 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