

## Product Datasheet

# 10-port Gigabit Uplink Industrial PoE Fiber Switch

(ONV-IPS31108PFB)



## OVERVIEW

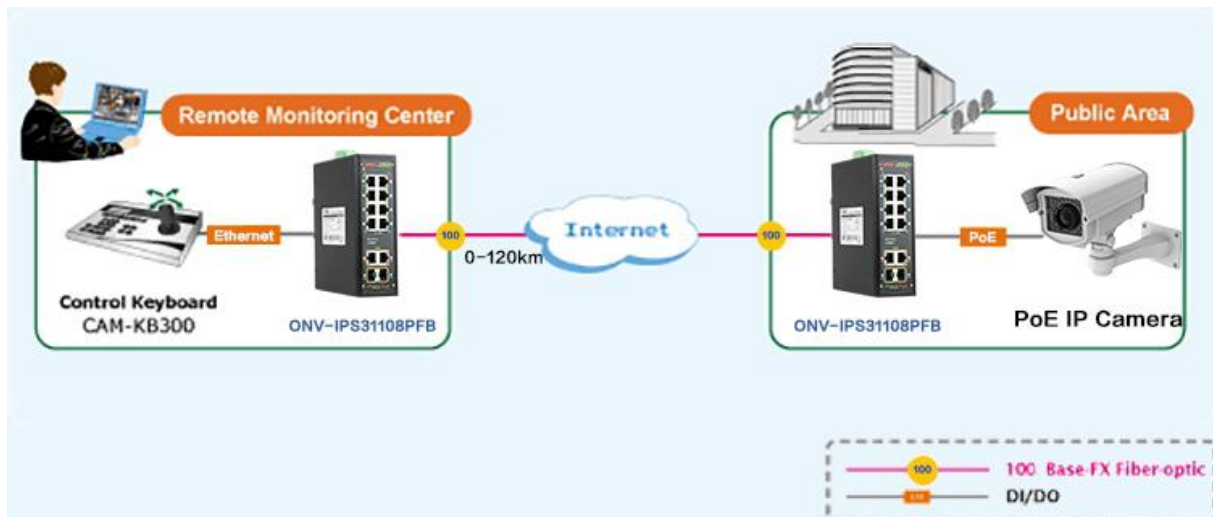
The ONV-IPS31108PFB series is a 10/100M industrial PoE fiber switch independently developed by ONV. It has 8\*10/100M PoE ports and 2\*10/100/1000M RJ45 ports and 2\*1000M SFP slot ports (2\*combo port), Port 1-8 can support IEEE 802.3af/at PoE standard, single port PoE power up to 30W, the maximum PoE output power is 120W (at-240W). 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, webcam, VoIP phone, industrial sensor through network cable, and meet the network environment that needs 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 set up a cost-effective and stable communication network.

Unmanaged model, plug and play, no configuration, easy to use.

## FEATURE

### ■ 100M access, gigabit (TP/SFP) combo port

- ◇ All series supports "10/100M RJ45 port and gigabit (TP/SFP) combo port" combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.



### ■ Port lightning protection, wide voltage input

- ◇ Contact discharge 8KV, air discharge 15KV; port lightning protection common-mode 4KV, differential mode 2KV;
- ◇ Industrial dual power input.
- ◇ DC INPUT: 48V-57V, non-PoE DC INPUT: 12-48V.

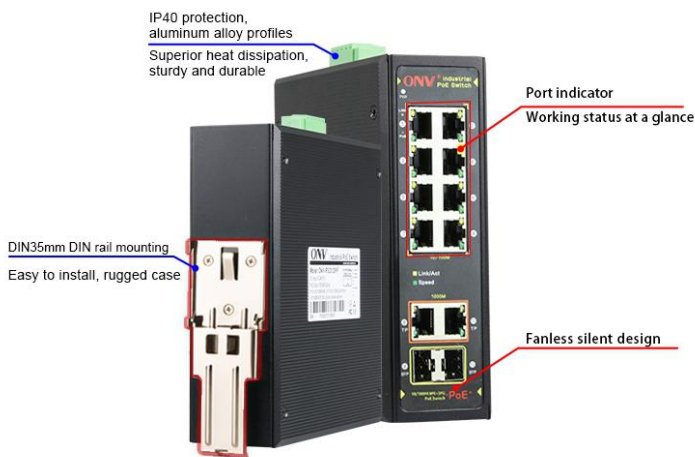


■ **Intelligent PoE power supply**

- ◇ 8\*10/100Base-TX RJ45 ports support PoE power supply to meet the needs of PoE power supply in various scenarios in the industrial field.
- ◇ IEEE 802.3af/at PoE standard, without damaging non-PoE devices.
- ◇ 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**

- ◇ Low power consumption, No fan, aluminum shell.
- ◇ CE, FCC, RoHS.
- ◇ The user-friendly panel, it can show the device status through the LED indicator of PWR, Link, PoE.



## TECHNICAL SPECIFICATION

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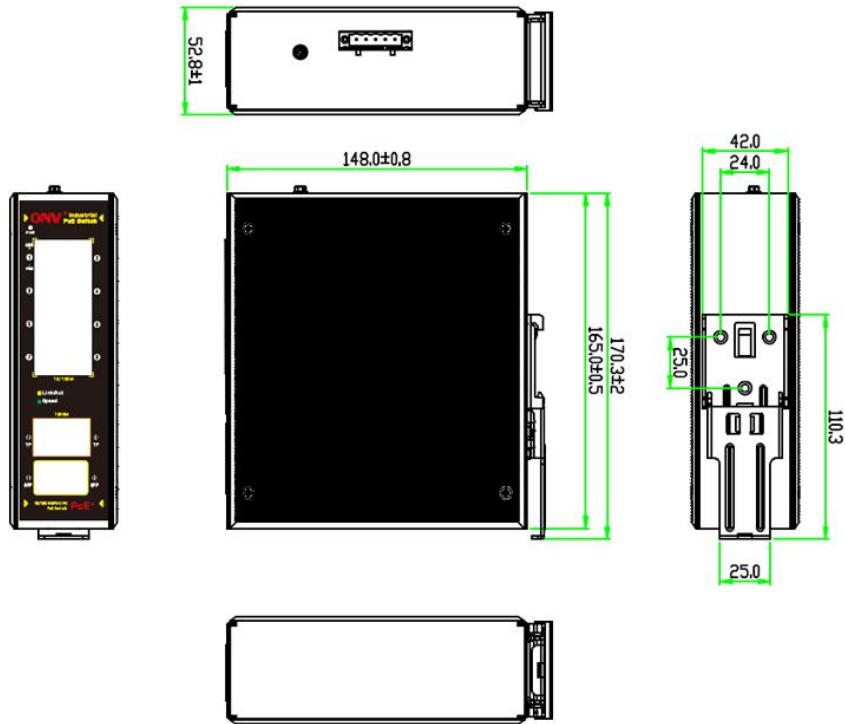
Model	ONV-IPS31108PFB	ONV-IPS31108PFB-at
Interface Characteristics		

Fixed Port	<p>8*10/100Base-TX PoE ports (Data/Power)</p> <p>2*10/100/1000M RJ45 ports (Data)</p> <p>2*1000M SFP slot ports(Data)</p> <p>2 set of V+, V- redundant DC power interface (5 Pin Phoenix terminal)</p>
Twisted Pair Transmission	<p>10BASE-T: Cat3,4,5 UTP(≤100 meter)</p> <p>100BASE-TX: Cat5 or later UTP(≤100 meter)</p> <p>1000BASE-T: Cat5e or later UTP(≤100 meter)</p>
Ethernet Port	<p>Port 1-8 support 10/100Base-TX, Port 9-10 support 10/100/1000Base-T(X)</p> <p>auto-sensing, full/half duplex MDI/MDI-X self-adaption</p>
SFP Slot Port	<p>Gigabit SFP optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)</p>
Optical Cable/ Distance	<p>Multi mode: 850nm 0~500M; 1310nm 0~2kM;</p> <p>single mode: 1310nm 0~40KM,1550nm 0-120KM.</p>
<b>Chip Parameter</b>	
Network Protocol	<p>IEEE802.3 10BASE-T, IEEE802.3i 10Base-T</p> <p>IEEE802.3u 100Base-TX , IEEE802.3ab 1000Base-T</p> <p>IEEE802.3z 1000Base-X</p> <p>IEEE802.3x</p>
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	5.6Gbps
Forwarding Rate@64byte	4.17Mpps
MAC	16K

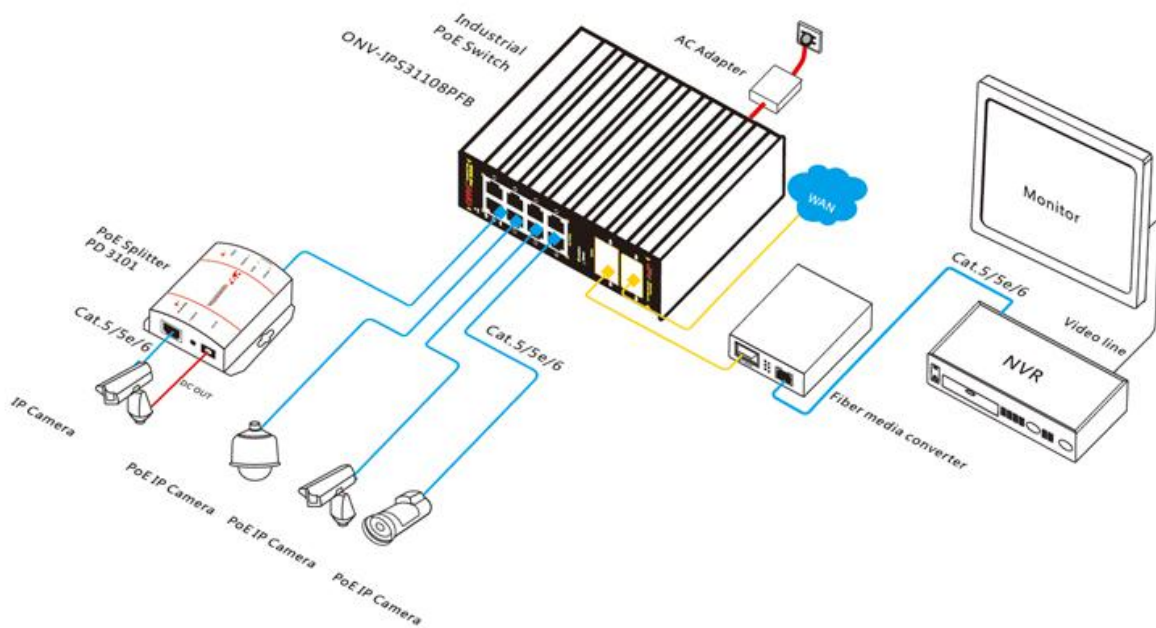
Buffer Memory	4M	
Jumbo Frame	10K	
LED Indicator	Powe: PWR (green), Network: Link,link/Act (yellow), Rate: Speed (green) , PoE: PoE (green)	
<b>PoE &amp; Power</b>		
PoE Port	Port 1-8	
Power Supply Pin	Default 1/2 (+), 3/6 (-) , optional 4/5 (+), 7/8 (-)	
Max Power Per Port	30W; IEEE802.3af/at	
Total PWR / Input Voltage	120W /48VDC	240W /48VDC
Power Consumption	Standby<6W,Full load<120W	Standby<8W, Full load<240W
Working Voltage	48-57VDC; 5 Pin industrial Phoenix terminal, support anti-reverse protection.	
Power Supply	No, optional 48V/120W or 48V/240W 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)	165*148*54mm	
Net /Gross Weight	<1.3kg / <1.8 kg	
Installation	Desktop, DIN rail	
<b>Certification &amp; Warranty</b>		

Lightning protection / protection level	<p>Lightning protection: 6KV 8/20us; Protection level: IP40</p> <p>IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge</p> <p>IEC61000-4-3(RS):10V/m(80~1000MHz)</p> <p>IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV</p> <p>IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV</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 to 3s</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>IEC61000-4-16(common-mode transmission):30V; 300V,1s</p> <p>FCC Part 15/CISPR22(EN55022):Class A</p> <p>IEC61000-6-2(Common Industrial Standard)</p>
Mechanical Properties	<p>IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock)</p> <p>IEC60068-2-32 (free fall)</p>
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS;
Warranty	5 years , lifelong maintenance.

## DIMENSION



## APPLICATION



## ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS31108PFB	Unmanaged industrial PoE fiber switch with 8*10/100M PoE ports and 2*10/100/1000M RJ45 ports and 2*1000M SFP slot ports (combo port), Port	120W
ONV-IPS31108PFB-a t	1-8 can support PoE IEEE802.3af/at. It can support DC dual redundant power input and DIN rail mounting.	240W

**Note:** Industrial PoE switch does not match the SFP optical module and power supply.

## PACKING LIST

	CONTENT	QTY	UNIT
PACKING LIST	10-port gigabit uplink industrial PoE fiber switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

## POWER SUPPLY SELECTION TABLE

Product	Model	Description	Unit
130W Desktop Power Adaptor	GWS-AP130-52	Desktop tape 130W single set of output power adapter; Input Voltage:AC 100V~240V 50-60Hz,2.3A Output Voltage:DC 52V 2.5A Operation Temperature:-20℃—+65℃	PC
250W Desktop Power Adaptor	GWS-AP250-52	Desktop tape 250W single set of output power adapter; Input Voltage:AC 100V~240V 50-60Hz,4.1A Output Voltage:DC 52V 4.8A Operation Temperature:-20℃—+65℃	PC
120W DIN Rail Industrial Power Supply	GWS-DP120-48	Din Rail type 120W single set of output power supply; Input Voltage:AC 100V~240V 50-60Hz,1.5A Output Voltage:DC 48V 2.5A Operation Temperature:-40℃—+70℃	PC
240W DIN Rail Industrial Power Supply	GWS-DP240-48	Din Rail type 240W single set of output power supply; Input Voltage:AC 100V~240V 50-60Hz,3A Output Voltage:DC 48V 5A Operation Temperature:-40℃—+70℃	PC

## RELATED PRODUCT

Model	Description
ONV-IPS31021PF	Unmanaged industrial PoE fiber switch with 1*10/100M RJ45 port and 1*155M SC port, Port 1-2 can support PoE IEEE802.3af/at. By default, the SC port 1310mm/20km single-mode dual-fiber module. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.
ONV-IPS31032PF	Unmanaged industrial PoE fiber switch with 2*10/100M PoE ports and 1*155M SC port, Port 1 -2 can support PoE IEEE802.3af/at. By default, the SC port 1310mm/20km single-mode dual-fiber module. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.
ONV-IPS31004PF	Unmanaged industrial PoE fiber switch with 4*10/100M RJ45 ports and 1*155M SC port, Port 1-4 can support PoE IEEE802.3af/at. By default, the SC port 1310mm/20km single-mode dual-fiber module. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.
ONV-IPS31064PF	Unmanaged industrial PoE fiber switch with 4*10/100M RJ45 ports and 2*155M SC ports, Port 1-4 can support PoE IEEE802.3af/at. It can support DC dual redundant power input and DIN rail mounting.
ONV-IPS31084PF	Unmanaged industrial PoE fiber switch with 4*10/100M RJ45 ports and 1*155M SC port, Port 1-4 can support PoE IEEE802.3af/at. By default, the SC port 1310mm/20km

single-mode dual-fiber module. It can support dual DC redundant power input (Phoenix terminal connection) and DIN rail mounting.

## CONTACT US



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