#### **Product Datasheet**

# **10-port Full Gigabit Industrial PoE Fiber Switch** (ONV-IPS33108PF)



#### **OVERVIEW**

The ONV-IPS33108PF is a full gigabit industrial PoE fiber switch independently developed by ONV. It has 8\*10/100/1000Base-T adaptive RJ45 ports and 2\*1000Base-X uplink SFP fiber ports. Port 1-8 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.

#### FEATURE

#### Full gigabit access, gigabit uplink SFP port

- ♦ Support non-blocking wire-speed forwarding.
- ♦ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Supports Gigabit RJ45 port and gigabit SFP 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.
- 8\*10/100/1000Base-T RJ45 ports, meeting the needs of security monitoring, teleconferencing
  system, wireless coverage, and other scenarios.
- Priority system for PoE port 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

- $\diamond$  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-IPS33108PF		
Interface Characteristics			
	2*1000Base-X uplink SFP fiber ports (Data)		
Fixed Port	8*10/100/1000Base-T PoE ports (Data/ Power)		
	2 sets of V+, V- redundant DC power port (5P Phoenix terminal)		
Ethernet Port	Port 1-8 support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/		

+86 755 33376606 Optical Network Video Technologies (Shenzhen) Co., Ltd.

www.onvcom.com

	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	Gigabit optical fiber port, default no include optical module (optional	
Optical riber ron	single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)	
Optical Cable/	Multi-mode: 850nm/ 0-550m	
Distance	Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km	
Chip Parameter		
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX	
Network Frotocor	IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	20Gbps	
Forwarding	14.88Mpps	
Rate@64byte		
MAC	8К	
Buffer Memory	4M	
Jumbo Frame	9.2K	
LED Indicator	Power: PWR (Green), Network: Link, Link/Act (Yellow), PoE: PoE (Green)	
PoE & Power Supply		
PoE Port	Port 1- 8	
Power Supply Pin	1/2(+) 3/6 (-)	
Max Power Per Port	30W, IEEE 802.3 af/at	
Power Consumption	Standby<8W, Full load af<120W, at<240W	
Working Voltage	DC48-57V, 5P industrial phoenix terminal, anti-reverse protection.	
Power Supply	No, optional 48V/120W or 48V/240W industrial power supply	
Physical Parameter		
Operation TEMP / Humidity	-40~+80°C, 5%~90% RH Non condensing	

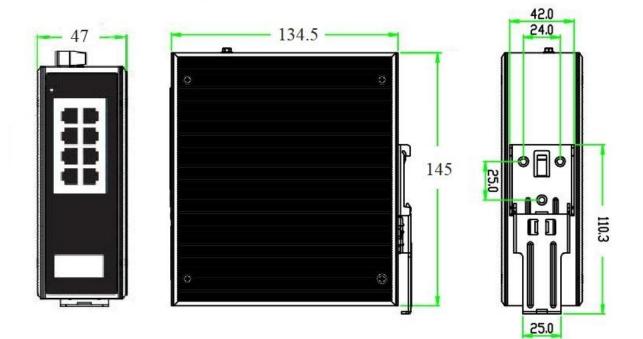
#### Use PoE, Choose ONV >>>

www.onvcom.com

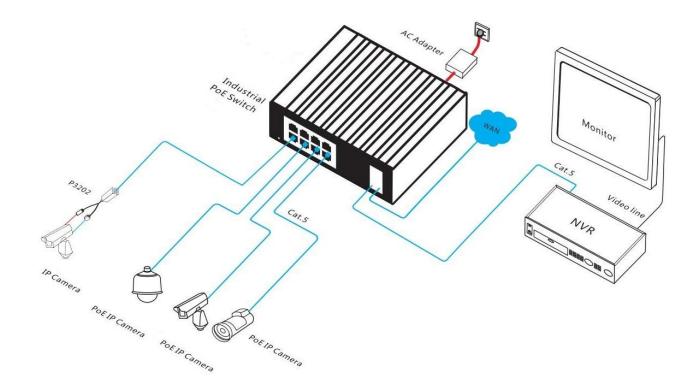
Storage TEMP /	-40~+85°C, 5%~95% RH Non condensing			
Humidity	145*124 5*17mm			
Dimension (L*W*H)	145*134.5*47mm			
Net /Gross Weight	0.9kg / 1.1kg			
Installation	Desktop, 35mm DIN Rail			
Certification & Warranty				
	Protection level: IP40			
	Lightning protection: 6KV 8/20us			
	IEC61000-4-3 (RS):10V/m (80~1000MHz)			
	FCC Part 15/CISPR22 (EN55022): Class B			
	IEC61000-6-2 (Common Industrial Standard)			
	IEC61000-4-9 (Pulsed magnet field): 1000A/m			
Linktoine Dectoritier	IEC61000-4-10 (Damped oscillation): 30A/m 1MHz			
Lightning Protection	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			
	IEC60068-2-6 (Anti Vibration), IEC60068-2-27 (Anti Shock),			
Mechanical Properties	IEC60068-2-32 (Free Fall)			
Contification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B,			
Certification	RoHS			
Warranty	5 years, lifelong maintenance.			

www.onvcom.com

## DIMENSION



## **APPLICATION**





### **ORDERING INFORMATION**

Model	Description	Recommended	
	Description	Power Supply	
ONV-IPS33108PF	Unmanaged industrial PoE fiber switch with		
	8*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber	400\\\/\040\\\	
	ports. Port 1-8 can support IEEE 802.3 af/at PoE standard.	120W/240W	
	It can support dual DC power input and DIN rail mounting.		

**Note:** The optical module and power supply are not included and need to be purchased.

### **PACKING LIST**

	Content	Qty	Unit
Packing List	10-port full gigabit industrial PoE fiber switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

### **OPTICAL MODULE**

Product	Model	Description	Unit
		Industrial SFP optical module, 1.25G multi-mode dual	
	2630-G	fiber 850nm, transmission distance: 550m, LC interface,	PC
		supports DDM function and hot plugging.	
1.25G		Industrial SFP optical module, 1.25G single-mode dual	
Optical	2632-G	fiber 1310nm, transmission distance: 20km, LC interface,	PC
Module		supports DDM function and hot plugging.	
		Industrial SFP optical module, 1.25G single-mode single	
	2612-T-G	fiber TX1310nm/ RX1550nm, transmission distance:	PC
		20km, LC interface, supports DDM function and hot	

		plugging.	
	2613-R-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC
	2612-T-SC-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, SC interface, supports DDM function and hot plugging.	PC
	2613-R-SC-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, SC interface, supports DDM function and hot plugging.	PC
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

## **POWER SUPPLY**

Product	Model	Description	Unit
		Desktop 130W single set of output power adapter	
130W Desktop	GWS-AP130-52	Input Voltage: AC100V~240V 50-60Hz, 2.3A	PC
Power Aadapter	GWS-AF 130-32	Output Voltage: DC52V, 2.5A	10
		Operation Temperature: -20 $^\circ\!\!\mathbb{C}$ to +65 $^\circ\!\!\mathbb{C}$	
		Desktop 250W single set of output power adapter	
250W Desktop		Input Voltage: AC100V~240V 50-60Hz, 4.1A	PC
Power Aadapter	GWS-AP250-52	Output Voltage: DC52V, 4.8A	PC
		Operation Temperature: -20 $^\circ\!\!\mathbb{C}$ to +65 $^\circ\!\!\mathbb{C}$	
120W DIN Rail		DIN Rail 120W single set of output power supply	PC
Industrial Power	GWS-DP120-48	Input Voltage: AC100V~240V 50-60Hz, 2.3A	FU

#### Use PoE, Choose ONV >>>

www.onvcom.com

Supply		Output Voltage: DC48V, 2.5A	
		Operation Temperature: -40 $^\circ\!{\rm C}$ to +70 $^\circ\!{\rm C}$	
240W DIN Rail		DIN Rail 240W single set of output power supply	
Industrial Power	GWS-DP240-48	Input Voltage: AC100V~240V 50-60Hz, 3.0A	PC
	GW3-DF240-40	Output Voltage: DC48V, 5.0A	FC
Supply		Operation Temperature: -40 $^\circ\!{\rm C}$ to +70 $^\circ\!{\rm C}$	

### **RELATED PRODUCT**

Model	Description
	Unmanaged industrial PoE fiber switch with 2*10/100/1000M RJ45 ports
ONV-IPS33032PF	and 1*1000M uplink SFP fiber port. Port 1-2 can support IEEE 802.3 af/at
	PoE standard. It can support dual DC power input and DIN rail mounting.
	Unmanaged industrial PoE fiber switch with 2*10/100/1000M RJ45 ports
ONV-IPS33042PF	and 2*1000M uplink SFP fiber ports. Port 1-2 can support IEEE 802.3 af/at
	PoE standard. It can support dual DC power input and DIN rail mounting.
	Unmanaged industrial PoE fiber switch with 4*10/100/1000M RJ45 ports
ONV-IPS33064PF	and 2*1000M uplink SFP fiber ports. Port 1-4 can support IEEE 802.3 af/at
	PoE standard. It can support dual DC power input and DIN rail mounting.
ONV-IPS33128PF	Unmanaged industrial PoE fiber switch with 10*10/100/1000M RJ45 ports
	and 2*1000M uplink SFP fiber port. Port 1-8 can support IEEE 802.3 af/at
	PoE standard. It can support dual DC power input and DIN rail mounting.

## **CONTACT US**

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