Product Datasheet

5-port 10/100M Industrial Ethernet Switch

(ONV-IPS1004F)



OVERVIEW

The ONV-IPS1004F is a 10/100M industrial Ethernet fiber switch independently developed by ONV. It has 4*10/100M RJ45 ports and 1*155M uplink SC fiber port, and each port can support full line-rate forwarding.

The ONV-IPS1004F has excellent industrial field environment adaptability (mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.). It is suitable for industrial scenes such as intelligent transportation, rail transit, power industry, mining, petroleum, shipping, metallurgy, and green energy construction to 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 100M RJ45 port and 155M SC fiber port combination to meet networking needs in various scenarios.

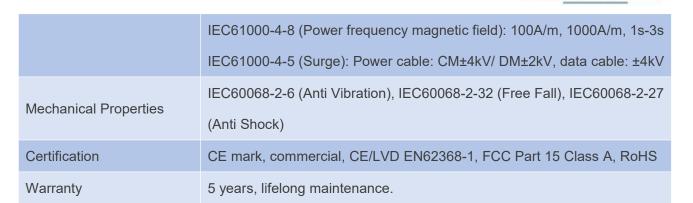
■ Stable and reliable

- ♦ CCC, CE, FCC, RoHS.
- The user-friendly panel can show the device status through the LED indicator of PWR and Link.
- ♦ Low power consumption, aluminum alloy housing, and excellent heat dissipation to ensure the stable operation of the switch.

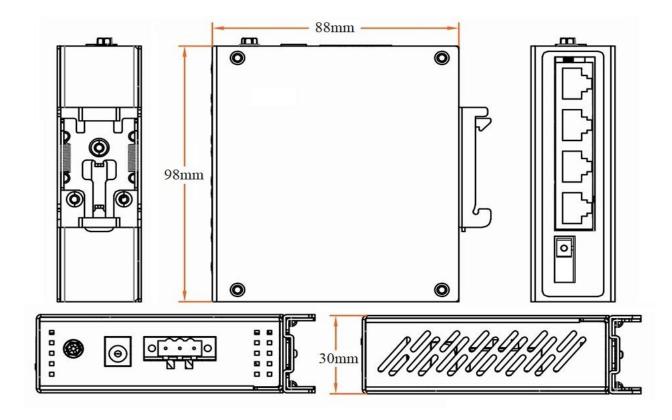
TECHNICAL SPECIFICATION

Model	ONV-IPS1004F
Interface Characteristics	
Fixed Port	1*155M uplink SC fiber port (Data)
TIXEG FOIL	4*10/100Base-TX RJ45 ports (Data)
Ethernet Port	Port 1-4 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: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	Default 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 802.3u 100Base-FX, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	1.0Gbps (non-blocking)

Forwarding Rate @64byte	0.744Mpps		
MAC	1K		
Buffer Memory	512K		
Jumbo Frame	2048bytes		
LED Indicator	Power: PWR (Green), Network: Link 1-4 (Yellow), Fiber port: FX (Green		
Power Supply			
Power Consumption	Standby<3W, Full load<5W		
Input Voltage/ Interface	DC12-48V, 3P industrial terminal and DC power jack, support anti-reverse protection		
Power Supply	No, optional 12V/24W or 24V/24W 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			
	Protection level: IP30		
	Lightning protection: 6KV 8/20us		
	IEC61000-4-3 (RS):10V/m (80~1000MHz)		
	FCC Part 15/CISPR22 (EN55022): Class A		
	IEC61000-6-2 (Common Industrial Standard)		
Lightning Protection	IEC61000-4-9 (Pulsed magnet field): 1000A/m		
Lightining i Totooton	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)		



DIMENSION

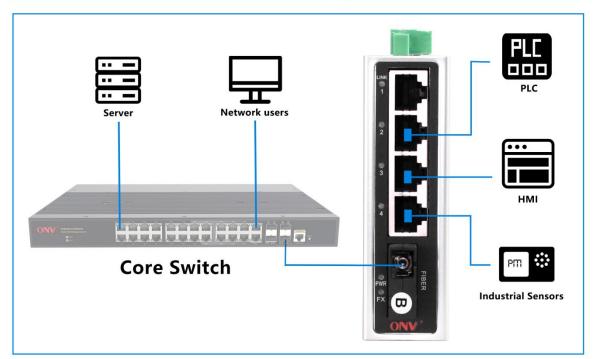


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APPLICATION







ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS1004F	Unmanaged industrial Ethernet fiber switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm/20km single-mode dual fiber optical module). It can support dual DC power input and DIN rail mounting.	24W
ONV-IPS1004F-A	Unmanaged industrial Ethernet fiber switch with 4*10/100M	24W

	RJ45 ports and 1*155M uplink SC fiber port (1310nm/20km	
	single-mode single fiber optical module). It can support dual	
	DC power input and DIN rail mounting.	
ONV-IPS1004F-B	Unmanaged industrial Ethernet fiber switch with 4*10/100M	
	RJ45 ports and 1*155M uplink SC fiber port (1550nm/20km	24W
	single-mode single fiber optical module). It can support dual	24 V V
	DC power input and DIN rail mounting.	

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

PACKING LIST

Packing List	Content	Qty	Unit
	5-port 10/100M industrial Ethernet switch	1	Set
	User Guide	1	PC
	Warranty Card and Certificate of Conformity	1	PC

POWER SUPPLY

Product	Model	Description	Unit
24W DIN Rail Industrial Power Supply	GWS-DP24-12	DIN Rail 24W single set of output power supply Input Voltage: AC100V~240V 50-60H, 0.35A Output Voltage: DC12V, 2.0A Operation Temperature: -40℃ to +70℃	PC
24W DIN Rail Industrial Power Supply	GWS-DP24-24	DIN Rail 24W single set of output power supply Input Voltage: AC100V~240V 50-60H, 0.35A Output Voltage: DC24V, 1.0A Operation Temperature: -40℃ to +70℃	PC



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