

Product Datasheet

5-port 10/100M Industrial Ethernet Switch

(ONV-IPS31004F)



OVERVIEW

The ONV-IPS31004F is a 10/100M industrial Ethernet fiber switch independently developed by ONV. It has 4*10/100M adaptive RJ45 ports and 1*155M SC fiber port. Each port can support full line-rate forwarding.

The ONV-IPS31004F has excellent industrial field environment adaptability (mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.). Unmanaged mode, plug and play, no configuration, easy to use. 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.

FEATURE

■ 10/100M access, 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.

■ 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, no fan, aluminum shell, and excellent heat dissipation to ensure the stable operation of the switch.

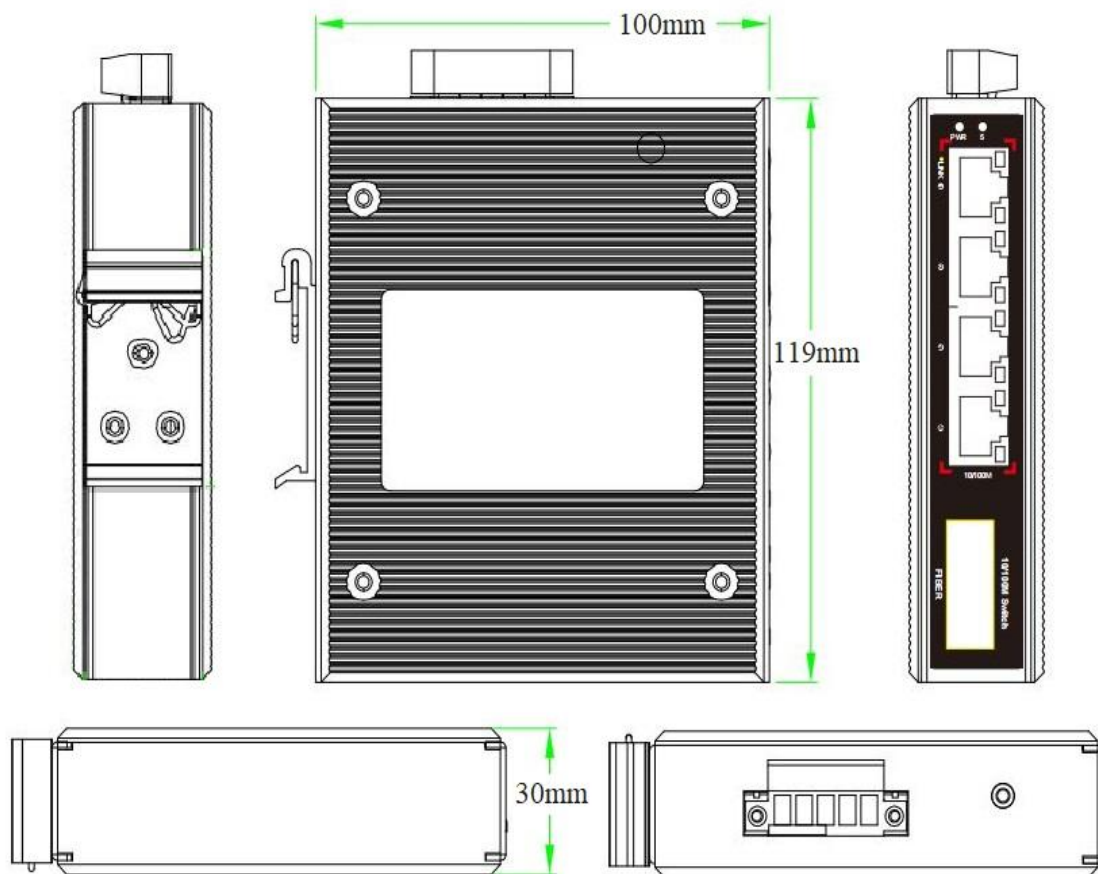
TECHNICAL SPECIFICATION

Model	ONV-IPS31004F
Interface Characteristics	
Fixed Port	1*155M uplink SC fiber port (Data) 4*10/100Base-T RJ45 ports (Data /Power) 2 sets V+, V- redundant DC power ports (5P Phoenix terminal)
Ethernet Port	Port 1-4 can support 10/100Base-T(X) auto-sensing, full/ half duplex MDI/MDI-X self-adaption
Twisted Pair	10BASE-T: Cat3,4,5 UTP (≤100 meters)
Transmission	100BASE-TX: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	Default optical module is single-mode dual fiber 20km, SC port (optional single-mode single fiber and multi-mode dual fiber optical module)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500m, 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	1.6Gbps (non-blocking)
Forwarding Rate	0.744Mpps

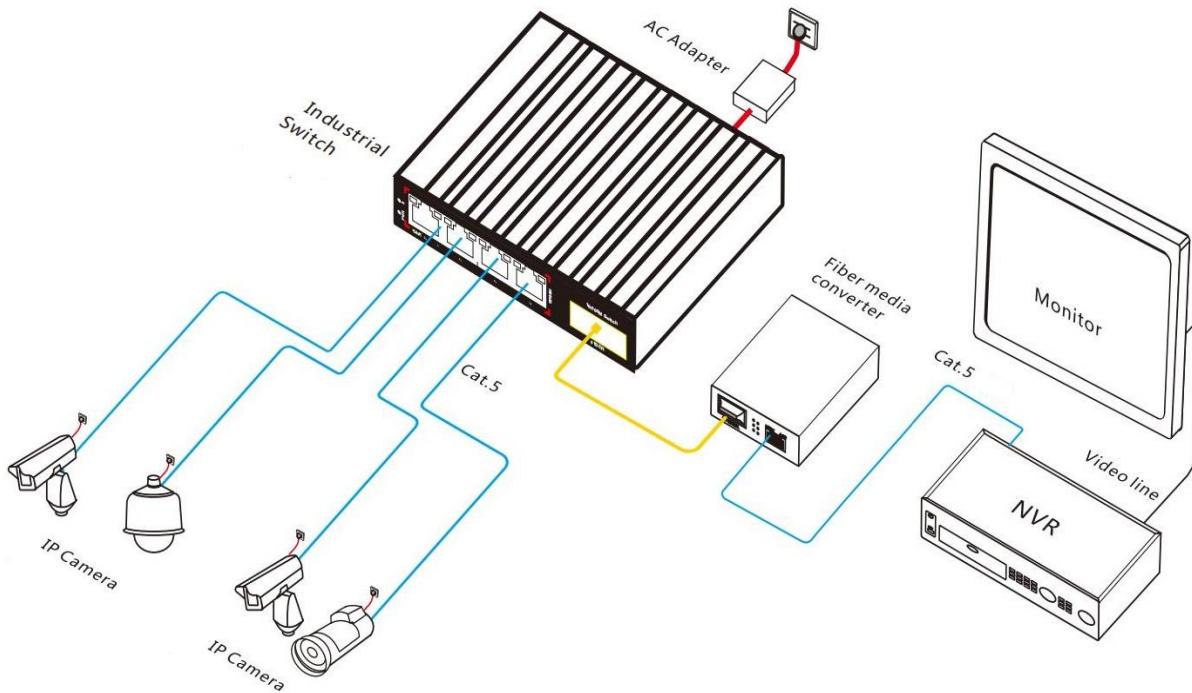
@64byte	
MAC	1K
Buffer Memory	768K
Jumbo Frames	9.2K
LED Indicator	Power: PWR(Green), Network: Link (Yellow), Fiber port: L/A (Green)
Power Supply	
Power Consumption	Standby<3W, Full load<6W
Power Supply	No, optional 24V/24W industrial power supply
Working Voltage	DC12-48V, 5P industrial Phoenix terminal, support anti-reverse protection.
Physical Parameter	
Operation TEMP / Humidity	-40~+80°C, 5%~90% RH Non-condensing
Storage TEMP / Humidity	-40~+85°C, 5%~95% RH Non-condensing
Dimension	119*100*30mm
Net /Gross Weight	0.4kg /0.5kg
Installation	Desktop, 35mm DIN Rail
Certification & Warranty	
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): CM2.5kV, DM1kV</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>

	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
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-IPS31004F	Unmanaged industrial Ethernet 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.	12W/24W
ONV-IPS31004F-M	Unmanaged industrial Ethernet switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (850nm /0.5km or 1310nm /2km multi-mode dual fiber optical module). It can support dual DC power input and DIN rail mounting.	12W/24W
ONV-IPS31004F-A	Unmanaged industrial Ethernet switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1310nm	12W/24W

	/20km single-mode single fiber optical module). It can support dual DC power input and DIN rail mounting.	
ONV-IPS31004F-B	Unmanaged industrial Ethernet switch with 4*10/100M RJ45 ports and 1*155M uplink SC fiber port (1550nm /20km single-mode single fiber optical module). It can support dual DC power input and DIN rail mounting.	12W/24W
Note: The power supply is not included and needs to be purchased.		

PACKING LIST

	Content	Qty	Unit
Packing List	5-port 10/100M industrial Ethernet fiber switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

POWER SUPPLY

Product	Model	Description	Unit
12W DIN Rail Industrial Power Supply	GWS-DP12-12	DIN Rail 12W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 0.35A Output Voltage: DC12V, 1.0A Operation Temperature: -40°C to +70°C	PC
24W DIN Rail Industrial Power Supply	GWS-DP24-24	DIN Rail 24W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 0.35A Output Voltage: DC24V, 1.0A Operation Temperature: -40°C to +70°C	PC

RELATED PRODUCT

Model	Description
ONV-IPS33032FS	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink SC fiber port. It can support dual DC power input and DIN rail mounting.
ONV-IPS33042F	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. It can support dual DC power input and DIN rail mounting.
ONV-IPS33064F	Unmanaged industrial Ethernet fiber switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. It can support dual DC power input and DIN rail mounting.
ONV-IPS33108F	Unmanaged industrial Ethernet fiber switch with 8*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. It can support dual DC power input and DIN rail mounting.
ONV-IPS33128F	Unmanaged industrial Ethernet fiber switch with 10*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. It can support dual DC power input and DIN rail mounting.

CONTACT US



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