

## Product Datasheet

# 2-port 10/100M Industrial Ethernet Switch

(ONV-IPS1021F)



## OVERVIEW

The ONV-IPS1021F is a 10/100M industrial Ethernet fiber switch independently developed by ONV. It has 1\*10/100Base-TX RJ45 port and 1\*155M uplink SC fiber port, and each port can support full line-rate forwarding.

The ONV-IPS1021F 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 model, plug and play, no configuration, easy to use.

## FEATURE

- 10/100M access

- ◇ 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 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.

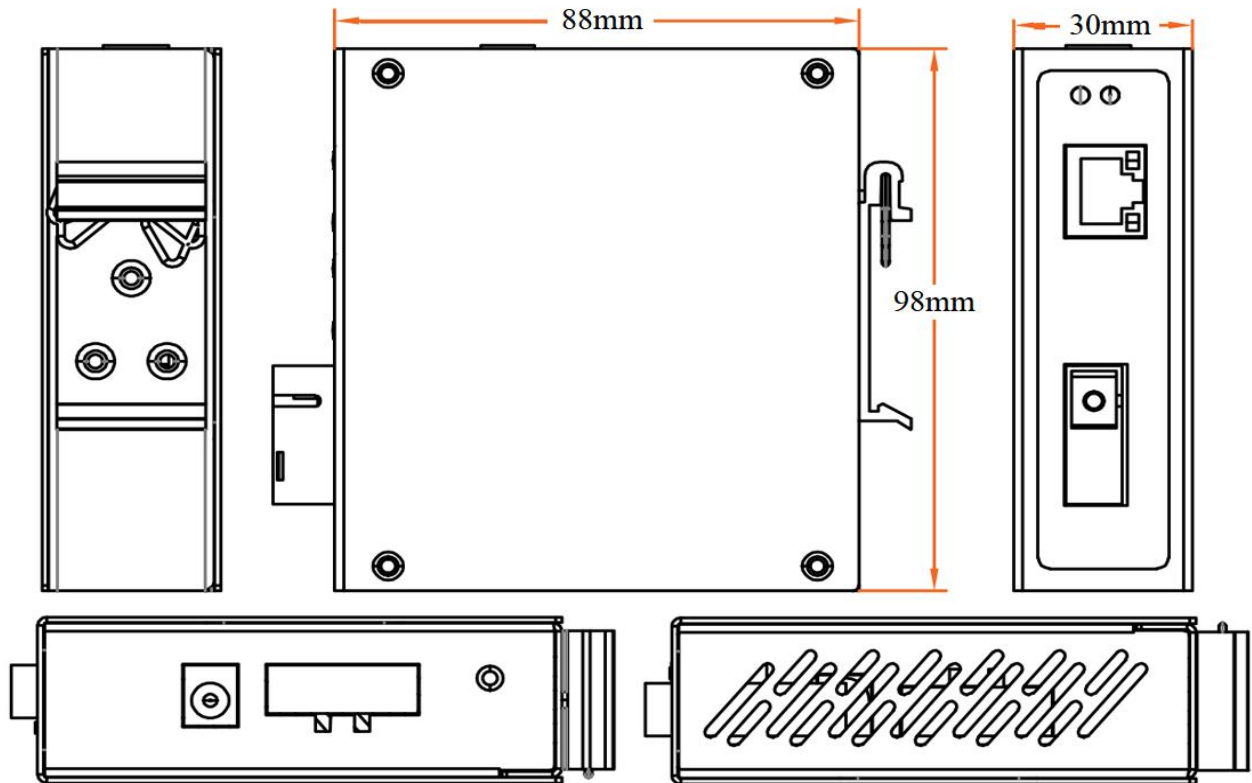
## TECHNICAL SPECIFICATION

Model	ONV-IPS1021F
<b>Interface Characteristics</b>	
Fixed Port	1*155M uplink SC fiber port (Data) 1*10/100Base-TX RJ45 port (Data)
Ethernet Port	Port 1 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: Cat5 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
<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	1.0Gbps (non-blocking)

Forwarding Rate@64byte	0.3Mpps
MAC	2K
Buffer Memory	512K
Jumbo Frame	2048bytes
LED Indicator	Power: PWR (Green), Network: Link (Yellow), Fiber port: 2 (Green)
<b>Power Supply</b>	
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
<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)	98*88*30mm
Net /Gross Weight	0.25kg / 0.35kg
Installation	Desktop, DIN Rail
<b>Certification &amp; Warranty</b>	
Lightning Protection	<p>Protection level: IP30</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 A</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> <p>IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz)</p>

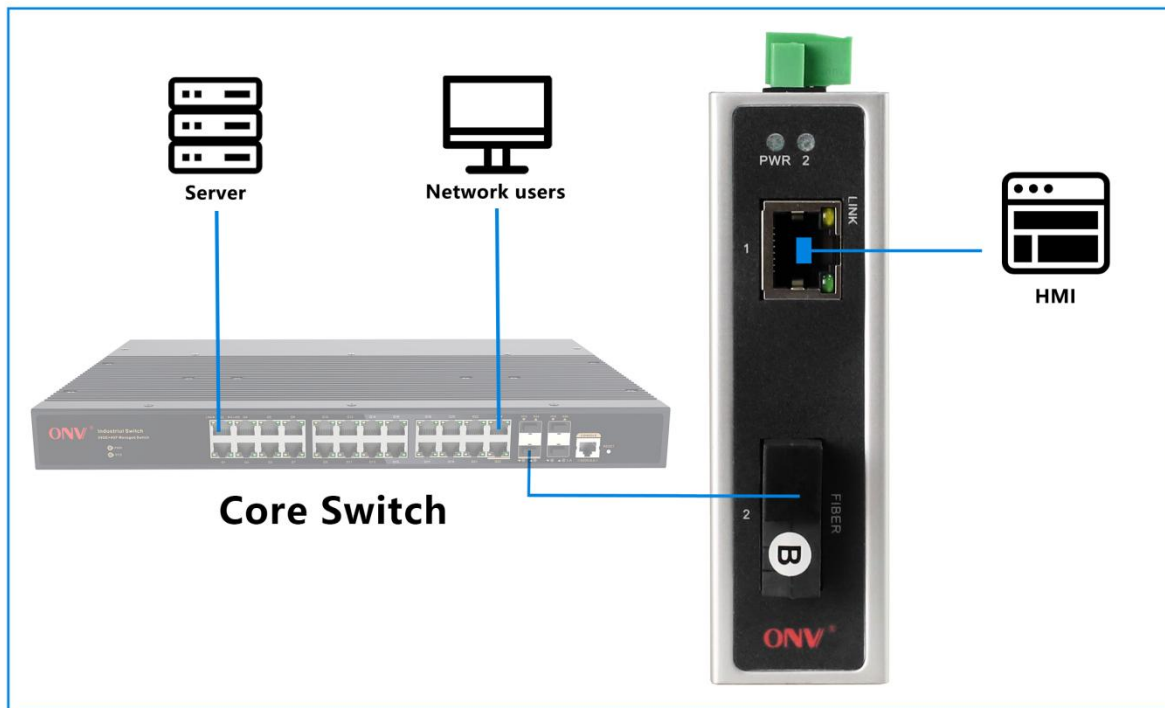
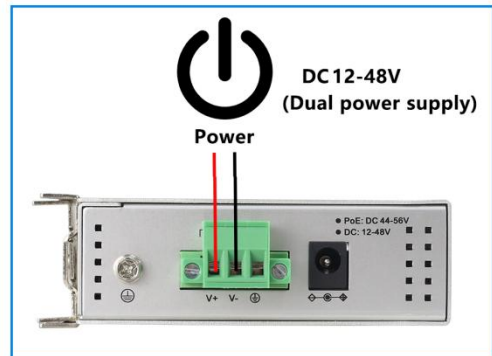
	IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s IEC61000-4-5 (Surge): Power cable: CM±4kV/ DM±2kV, data cable: ±4kV
Mechanical Properties	IEC60068-2-6 (Anti Vibration), IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock)
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS
Warranty	5 years, lifelong maintenance.

## DIMENSION



## APPLICATION

-  **Plug and play**
-  **Wide temperature range**
-  **DIN Rail installation**



## ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS1021F	Unmanaged industrial Ethernet fiber switch with 1*10/100M RJ45 port 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-IPS1021F-A	Unmanaged industrial Ethernet fiber switch with 1*10/100M RJ45 port 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.	24W
ONV-IPS1021F-B	Unmanaged industrial Ethernet fiber switch with 1*10/100M RJ45 port 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.	24W

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

## PACKING LIST

Packing List	Content	Qty	Unit
	2-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°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 50-60H, 0.35A Output Voltage: DC24V, 1.0A Operation Temperature: -40°C to +70°C	PC

## CONTACT US

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