

Product Datasheet

2-port Gigabit Industrial Ethernet Fiber Switch

(ONV-IPS33021FS)



OVERVIEW

The ONV-IPS33021FS is a gigabit industrial Ethernet fiber switch independently developed by ONV. It has 1*10/100/1000Base-T RJ45 port and 1*1000Base-X SC fiber port. Each port can support full line-rate forwarding.

The ONV-IPS33021FS has excellent industrial field environment adaptability (including mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.). It is suitable for industrial scenes such as intelligent transportation, rail transit, electric power, mining, metallurgy and green energy construction to form a cost-effective and stable communication network. unmanaged mode, plug and play, no configuration, easy to use.

FEATURE

■ Gigabit line speed access, uplink Gigabit optical port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support Gigabit RJ45 port and 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.

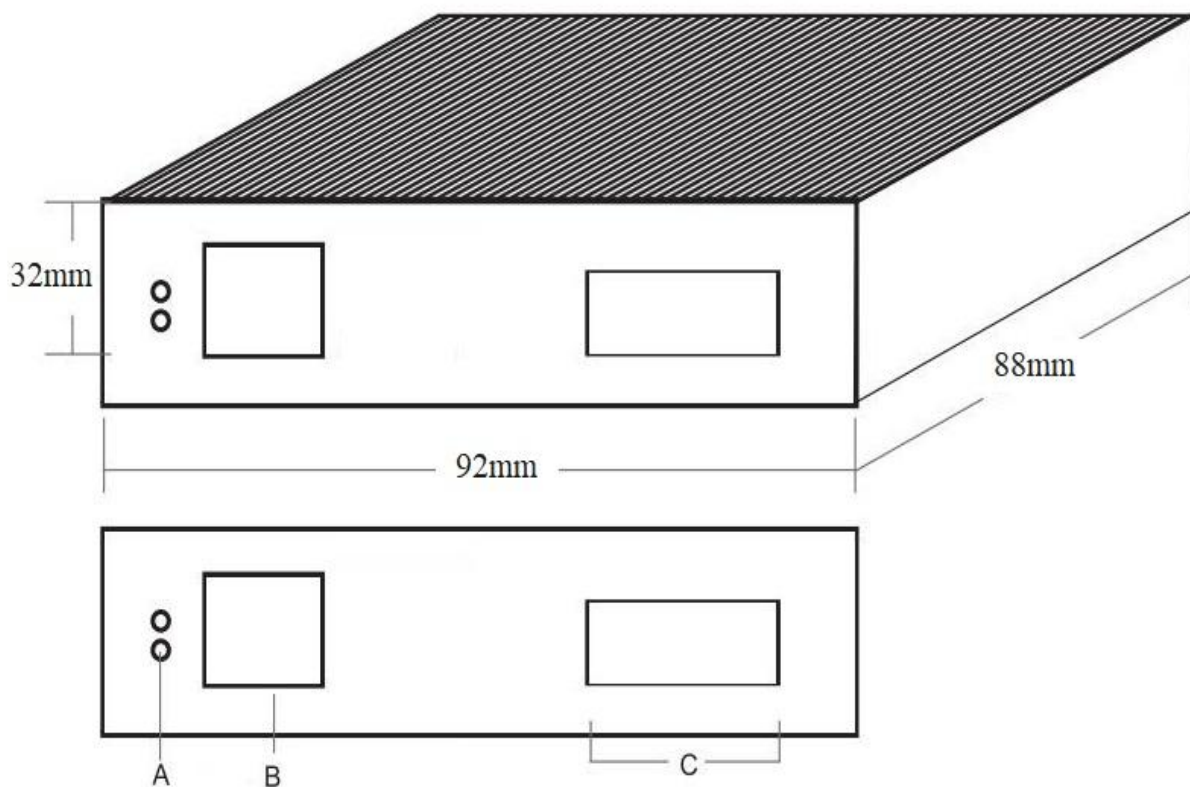
TECHNICAL SPECIFICATION

Model	ONV-IPS33021FS
Interface Characteristics	
Fixed Port	1*10/100/1000Base-T RJ45 port (Data) 1*1000Base-X uplink SC fiber port (Data) 2 sets V+, V- redundant DC power port (5P Phoenix terminal)
Ethernet Port	Port 1 can support 10/100/1000Base-T(X) 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) 1000BASE-T: 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, 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 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	10Gbps (non-blocking)

Forwarding Rate @64byte	2.98Mpps
MAC	2K
Buffer Memory	2M
Jumbo Frame	9.2K
LED Indicator	Power: PWR (Green), Network: Link (Yellow)
Power Supply	
Power Consumption	Standby<3W, Full load<5W
Working Voltage	DC12-48V, 5P industrial Phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 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)	92*88*32mm
Net /Gross Weight	0.3kg / 0.4kg
Installation	Desktop, 35mm DIN Rail
Certification & Warranty	
Lightning Protection	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 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): $\pm 8\text{kV}$ contact discharge, $\pm 15\text{kV}$ air discharge IEC61000-4-6 (Radio frequency transmission): 10V ($150\text{kHz}\sim 80\text{MHz}$) IEC61000-4-8 (Power frequency magnetic field): 100A/m , 1000A/m , $1\text{s}\sim 3\text{s}$ IEC61000-4-5 (Surge): Power cable: $\text{CM}\pm 4\text{kV}/\text{DM}\pm 2\text{kV}$, data cable: $\pm 4\text{kV}$
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

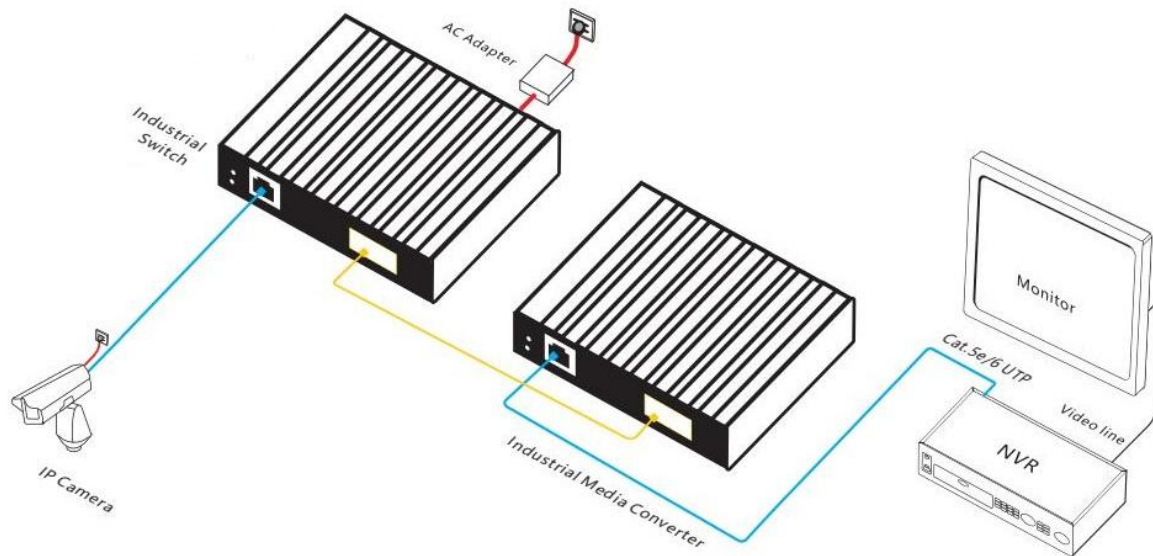


A. Work indicator

B. 1*10/100/1000M RJ45 port

C. 1*1000M SC fiber port

APPLICATION



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS33021FS	Unmanaged industrial Ethernet switch with 1*10/100/1000M RJ45 port and 1*1000M uplink SC fiber port (1310nm /20km single-mode dual fiber optical module). It can support dual DC power input and DIN rail mounting.	24V/24W
ONV-IPS33021FS-M	Unmanaged industrial Ethernet switch with 1*10/100/1000M RJ45 port and 1*1000M 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.	24V/24W
ONV-IPS33021FS-A	Unmanaged industrial Ethernet switch with 1*10/100/1000M RJ45 port and 1*1000M uplink SC fiber port (1310nm /20km single-mode single fiber optical	24V/24W

	module). It can support dual DC power input and DIN rail mounting.	
ONV-IPS33021FS-B	Unmanaged industrial Ethernet switch with 1*10/100/1000M RJ45 port and 1*1000M uplink SC fiber port (1550nm /20km single-mode single fiber optical module). It can support dual DC power input and DIN rail mounting.	24V/24W

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

PACKING LIST

	Content	Qty	Unit
Packing List	2-port gigabit industrial Ethernet fiber switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

OPTICAL MODULE

Product	Model	Description	Unit
1.25G Optical Module	2630-G	Industrial SFP optical module, 1.25G multi-mode dual fiber 850nm, transmission distance: 550m, LC interface, supports DDM function and hot plugging.	PC
	2632-G	Industrial SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC
	2612-T-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC
	2613-R-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC	PC

		interface, supports DDM function and hot plugging.	
	2612-T-G-SC	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-G-SC	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
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-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-IPS33064FG	Unmanaged industrial Ethernet fiber switch with 5*10/100/1000M RJ45 ports and 1*1000M SFP fiber port. It can support dual DC power input and DIN rail mounting.
ONV-IPS33064	Unmanaged industrial Ethernet switch with 6*10/100/1000M RJ45 ports. It can support dual DC power input and DIN rail mounting.
ONV-IPS33108	Unmanaged industrial Ethernet switch with 10*10/100/1000M RJ45 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



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