Product Datasheet

3-port Full Gigabit Industrial Ethernet Fiber Switch
(ONV-IPS33032FS)

OVERVIEW

The ONV-IPS33032FS is a full gigabit industrial Ethernet fiber switch independently developed by ONV. It has 2*10/100/1000Base-T RJ45 ports and 1*1000Base-X SC single-mode dual-fiber optical module (optional single-mode/multi-mode, single-fiber/dual-fiber optical module). Each port can support full line-rate forwarding.

ONV-IPS33032FS industrial Ethernet switch has excellent industrial field environment adaptability (including mechanical stability, climate adaptability, electromagnetic environment adaptability, etc.), protection level up to IP40, support for dual redundant power supply, low power consumption and fanless cooling technology, MTBF average trouble-free working time up to 35 years, 5-year warranty, unmanaged models, plug and play, no configuration, easy to use. 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.

FEATURE

■ **Gigabit line speed access, Gigabit optical port uplink**

◇ Support Gigabit Ethernet port and Gigabit SC optical port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

◇ Support non-blocking wire-speed forwarding.

◇ Support full-duplex based on IEEE802.3x and half-duplex based on backpressure

■ **Stable and reliable**

◇ Low power consumption, No fan, aluminum shell.

◇ CCC,CE, FCC, RoHS.

◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link.

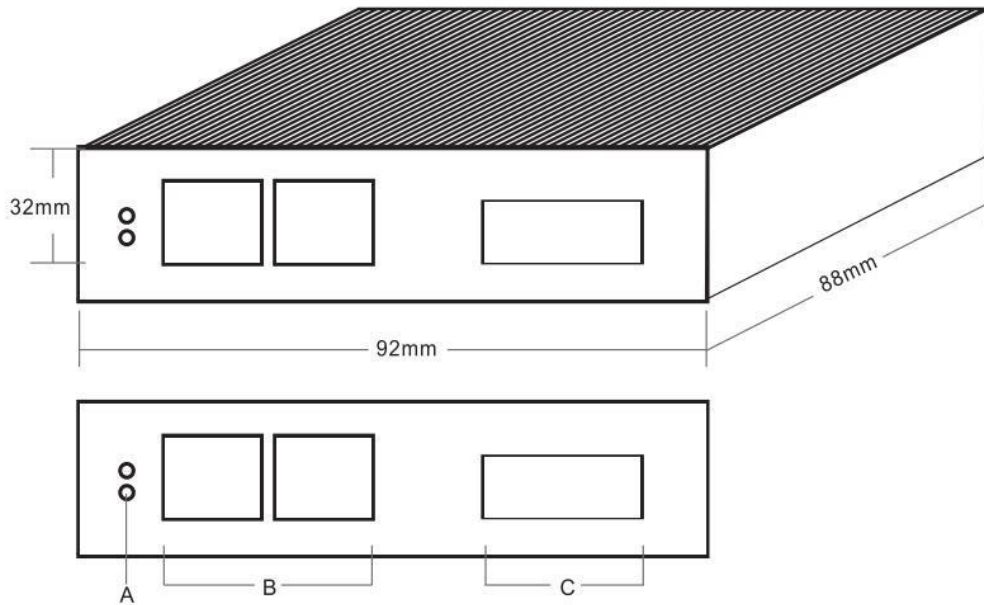# TECHNICAL SPECIFICATION

Model	ONV-IPS33021FS	ONV-IPS33032FS
Interface Characteristics		
Fixed Port	1*10/100/1000Base-T RJ45 port (Data) 1*1000Base-X single-mode dual-fiber SC fiber port(Data) 2 set of V+, V- redundant DC power interface (5P Phoenix terminal)	2*10/100/1000Base-T RJ45 ports (Data) 1*1000Base-X single-mode dual-fiber SC fiber port(Data) 2 set of V+, V- redundant DC power interface (5P Phoenix terminal)
Ethernet Port	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 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-T: Cat5e or later UTP(≤100 meter)	

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

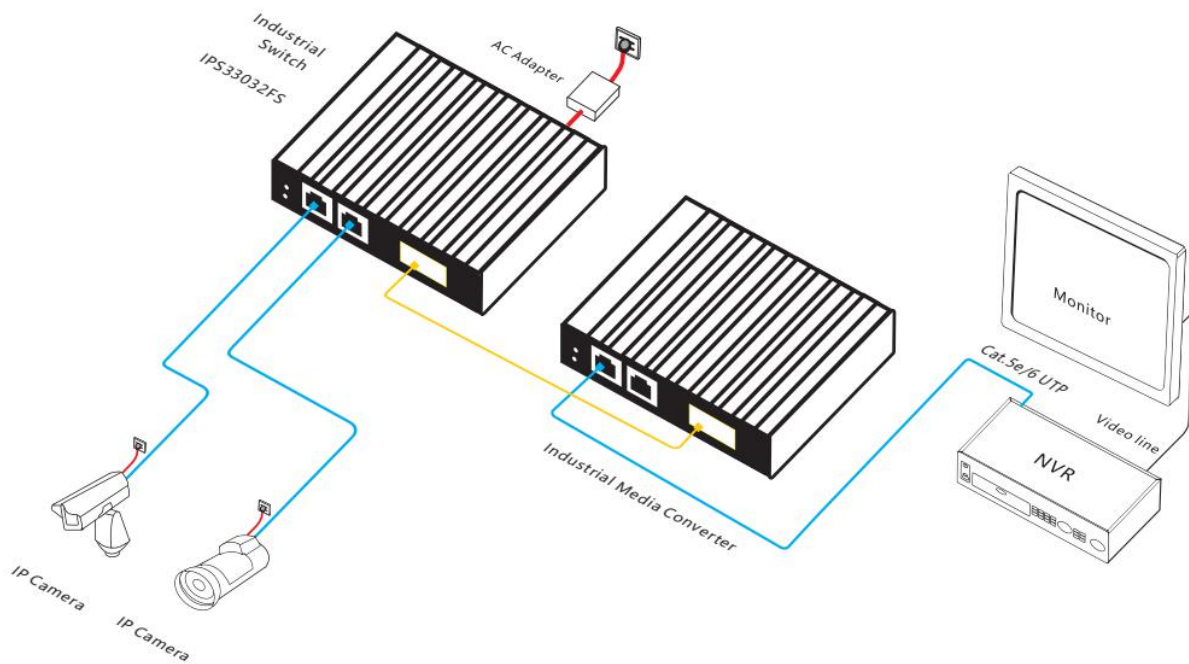| Fiber Port	Default Gigabit single-mode dual-fiber SC optical module (optional single-mode single-fiber/multi-mode dual-fiber optical module)	
Optical Cable/ Distance	Multi-mode: 850nm/ 0 ~ 500m, Single-mode: 1310nm/0 ~ 40km, 1550nm/ 0 ~ 120km.	
Chip Parameter		
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IIEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	10Gbps	
Forwarding Rate@64byte	2.98Mpps	4.46Mpps
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	Standby<4W, Full load<6W
Operating Voltage	12-57VDC, 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	<0.4kg / <0.6kg	

Installation	Desktop, 35mm DIN rail
Certification & Warranty	
Lightning Protection	Lightning protection: 6KV 8/20us; Protection level: IP40 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(Shockwave):CM 2.5kV,DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V,1s FCC Part 15/CISPR22(EN55022):Class B IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC, CE mark, commercial, CE/LVD EN60950, FCC Part 15 Class B RoHS
Warranty	5 years, lifelong maintenance.

DIMENSION

A. Working indicator

B. 2*10/100/1000M RJ45 ports

C. 1*1000M SC single-mode dual-fiber optical module

APPLICATION

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

ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS33021FS-M	Unmanaged industrial Ethernet fiber switch with 1*10/100/1000M RJ45 port and 1*1000M uplink multi-mode dual fiber (850nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W
ONV-IPS33021FS	Unmanaged industrial Ethernet fiber switch with 1*10/100/1000M RJ45 port and 1*1000M uplink single-mode dual-fiber(1310nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W
ONV-IPS33021FS-A	Unmanaged industrial Ethernet fiber switch with 1*10/100/1000M RJ45 port and 1*1000M uplink single-mode single-fiber(1310/1550nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W
ONV-IPS33021FS-B	Unmanaged industrial Ethernet fiber switch with 1*10/100/1000M RJ45 port and 1*1000M uplink single-mode single-fiber(1550/1310nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W
ONV-IPS33032FS-M	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink multi-mode dual fiber (850nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W

ONV-IPS33032FS	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink single-mode dual-fiber(1310nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W
ONV-IPS33032FS-A	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink single-mode single-fiber(1310/1550nm) SC optical module. It can support dual DC redundant power input and DIN rail mounting.	12W/24W
ONV-IPS33032FS-B	Unmanaged industrial Ethernet fiber switch with 2*10/100/1000M RJ45 ports and 1*1000M uplink single-mode single-fiber(1550/1310nm) SC optical module. It can support dual DC redundant power input and and DIN rail mounting.	12W/24W

Note: industrial Ethernet switch does not included the optical module and power supply.

PACKING LIST

PACKING LIST	CONTENT	QTY	UNIT
	3-port full gigabit industrial Ethernet fiber switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

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

OPTICAL MODULE INFORMATION

Product	Model	Description	Unit
1.25G Optical Module	ONV-2630-G	SFP optical module, 1.25G, multi mode dual fiber 850nm, transmission distance: 550m, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2632-G	SFP optical module, 1.25G, single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2612-T-G	Industrial SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2613-R-G	Industrial SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2612-T-SC-G	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
	ONV-2613-R-SC-G	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
Power Module	ONV-2633-G	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

POWER SUPPLY SELECTION TABLE

Product	Model	Description	Unit
24W DIN Rail Industrial Power Supply	GWS-DP24-24	Din Rail type 24W single set of output power supply Input Voltage:AC 100V~240V 50-60Hz,0.35A Output Voltage:DC24V 1.0A Operation Temperature:-40℃—+70℃	PC

RELATED PRODUCT

Model	Description
ONV-IPS33064F	Unmanaged industrial Ethernet fiber switch with 4*10/100/1000M RJ45 ports and 2*1000M SFP ports. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33064FG	Unmanaged industrial Ethernet fiber switch with 5*10/100/1000M RJ45 ports and 1*1000M SFP port. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33064	Unmanaged industrial Ethernet switch with 6*10/100/1000M RJ45 ports. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33108	Unmanaged industrial Ethernet switch with 10*10/100/1000M RJ45 ports. It can support dual DC redundant power input and and DIN rail mounting.
ONV-IPS33108F	Unmanaged industrial Ethernet fiber switch with 8*10/100/1000M RJ45 ports and 2*1000M SFP ports. It can support dual DC redundant power input and and DIN rail mounting.

ONV-IPS33128F	Unmanaged industrial Ethernet fiber switch with 10*10/100/1000M RJ45 ports and 2*1000M SFP ports. It can support dual DC redundant power input and 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

Website: www.onvcom.com

Zip: 518000

Headquarter Address: Room 1003, Block D, Terra Building, Futian District, Shenzhen,China

Factory Address:The 4-6th Floor, No. 59, Huaning Road, Xinwei Community, Dalang Street,

Longhua District, Shenzhen, China

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