

Product Datasheet

10-port Full Gigabit Easy Managed Industrial Ethernet Switch (ONV-IPS5108FM)



OVERVIEW

The ONV-IPS5108FM is a full Gigabit Easy managed industrial Ethernet fiber switch independently developed by ONV. It has 8*10/100/1000Base-T adaptive RJ45 ports and 2*100/1000Base-X uplink SFP fiber ports. Each port can support wire-speed forwarding. The ONV-IPS5108FM supports Web management, ONV-NMS management platform, and cloud management APP management, which can realize functions such as security network topology management, link aggregation, port management, port mirroring, and remote operation and maintenance. The switch has high reliability, is easy to install and maintain, has fast switching functions and multiple access ports, and is suitable for accessing LAN devices of various sizes. ONV-IPS5108FM follows industrial product design and materials, and its shell is made of aluminum alloy. It has excellent industrial site environment adaptability (mechanical stability, climate environment adaptability, electromagnetic environment adaptability, etc.). The protection level reaches IP40, dual redundancy power supply, low power consumption, no fan, 5-year warranty. It is suitable for establishing cost-effective, stable, and reliable communication networks in industrial

scenarios such as intelligent transportation, rail transportation, power industry, mining, petroleum, shipping, metallurgy, and green energy construction.

FEATURE

■ Gigabit access, SFP fiber port uplink

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- ◇ Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ Extreme optimization, minimalist application

- ◇ Real-time fault alarm and fault location.
- ◇ Remote upgrade, remote restart, and factory reset.
- ◇ Local platform, cloud platform and mobile APP operation and maintenance management.
- ◇ Visualized network topology management, VLAN division, QoS, link aggregation, ring network management, port mirroring, port control and bandwidth management.
- ◇ According to the application requirements of the industry, we have abandoned the complicated network management configuration while retaining the practical network management functions. Through the operation and maintenance platform, network deployment and centralized operation and maintenance can be quickly realized.

■ Stable and reliable

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, Link, and L/A.
- ◇ Low power consumption, no fan, aluminum shell, excellent heat dissipation to ensure the stable operation of the switch.

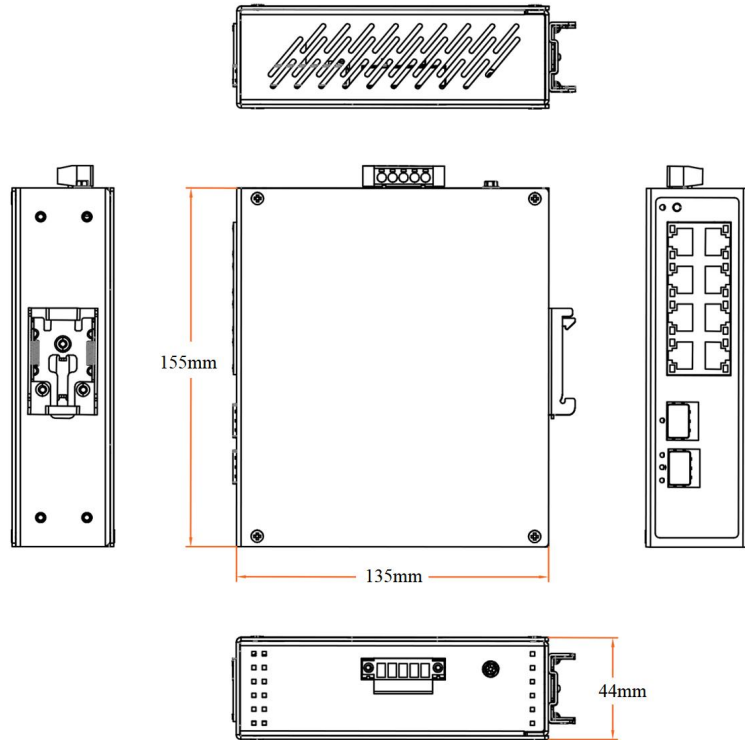
TECHNICAL SPECIFICATION

Model	ONV-IPS5108FM
Interface Characteristics	
Fixed Port	8*10/100/1000Base-T RJ45 ports (Data) 2*100/1000Base-X uplink SFP ports (Data) 2 groups of V+, V- redundant DC power port (5P phoenix terminal)
Ethernet Port	Port 1-8 support 10/100/1000Base-T 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)
SFP Slot Port	Gigabit optical fiber interface, default no included optical module (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)
Optical Cable	Multi-mode: 850nm/ 0-550m Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.
Chip Parameter	
Network Management Type	Simple web network management, cloud platform management
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full wire-speed)
Switching Capacity	20Gbps
Forwarding Rate@64byte	14.88Mpps
MAC	8K
Buffer Memory	2Mb
Jumbo Frame	9.2KB
LED Indicator	Power: PWR (Green), Network: Link G1-G8 (Yellow), Fiber port: L/A

	G9-G10 (Green)
Power Supply	
Power Consumption	Standby<8W, Full load<15W
Interface	5 Pin industrial Phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 48V/12W or 48V/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)	155*135*44mm
Net /Gross Weight	<0.6kg / <0.75kg
Installation	Desktop, 35mm DIN rail
Certification & Warranty	
Lightning Protection	Protection level: IP30 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): CM 2.5kV, DM 1kV 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) 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

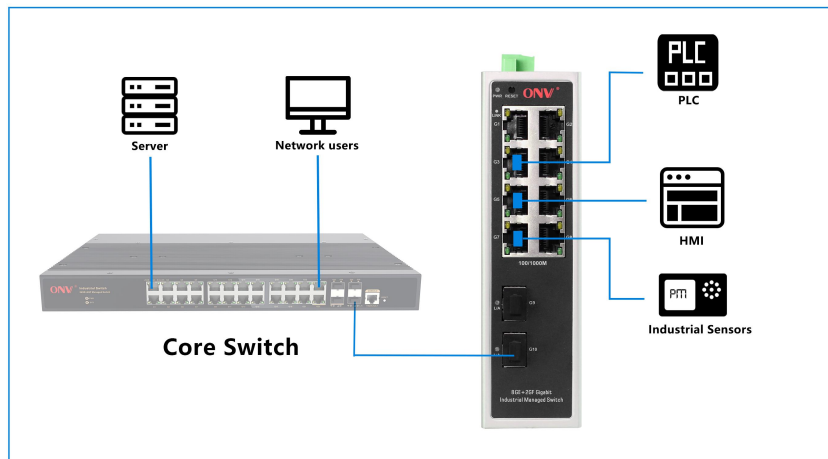
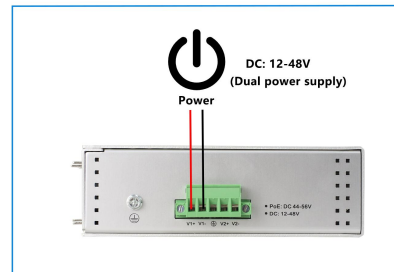
Mechanical	IEC60068-2-6 (Anti Vibration)
Properties	IEC60068-2-32 (Free Fall), IEC60068-2-27 (Anti Shock)
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	5 years, lifelong maintenance.
Network Management Features	
Interface	Port status display, Port traffic statistics Port duplex/negotiation rate configuration EEE Energy-saving and green Ethernet function IEEE802.3x flow control configuration (Full-duplex)
VLAN	Port-based IEEE802.1Q VLAN configuration (4K)
Port Aggregation	Static aggregation
Loop Protection	Loop protection function
Multicast	IGMP Snooping v1/v2, Max 256 multicast groups
Port Mirroring	Bidirectional data mirroring based on port
QoS	Diff-Serv QoS, Priority Mark/Remark 8*Output queues of each port, 802.1p/DSCP priority mapping
Security	Broadcast storm control, Port isolation, Port speed limit
DHCP	DHCP Snooping
Management	Mobile APP operation and maintenance management NMS platform management (Local platform/Cloud platform) One-key recovery, Cable Diagnose, Web Management (HTTPS)
System	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Category 5 and above Ethernet cables TCP/IP, network adapter, and network operating systems (Such as Microsoft Windows, Linux or Mac OS X) are installed on each computer in the network with Category 5 and above Ethernet cables

DIMENSION



APPLICATION

- Simple web network management
- Wide temperature range
- DIN Rail installation
- NMS+APP O&M



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS5108FM	Easy managed industrial Ethernet fiber switch with 8*10/100/1000M RJ45 ports and 2*100/1000M uplink SFP fiber ports. It can support dual DC power input and DIN rail mounting.	12W/24W

Note: optical module and power supply are not included, and need to be purchased separately.

PACKING LIST

Packing List	Content	Qty	Unit
	10-port full gigabit Easy managed industrial Ethernet switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

OPTICAL MODULE

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

2613-R-G	Industrial optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
2612-T-G-SC	Industrial optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
2613-R-G-SC	Industrial 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 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 50-60H, 0.5A 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 50-60H, 0.65A Output Voltage: DC24V, 1.0A Operation Temperature: -40°C to +70°C	PC

CONTACT US



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