

Product Datasheet

6-port Gigabit Easy Managed Industrial PoE Switch (ONV-IPS5064PFM)



OVERVIEW

The ONV-IPS5064PFM is a gigabit Easy managed industrial PoE switch independently developed by ONV. It features 4*10/100/1000Base-T auto-sensing RJ45 ports and 2*100/1000Base-X SFP fiber ports. Ports 1-4 support IEEE 802.3af/at PoE standards, with a single-port PoE power output of up to 30W. As a PoE power supply device, it automatically detects and identifies compliant powered devices and supplies them via Ethernet cable. It can power wireless APs, network cameras, VoIP phones, industrial sensors, and other PoE terminal devices via Ethernet cable, meeting the needs of network environments requiring high-density PoE power. It is suitable for building economical, efficient, stable, and reliable communication networks in industrial scenarios such as intelligent transportation, rail transit, power industry, mining, oil, shipping, metallurgy, and green energy construction.

The ONV-IPS5064PFM supports the ONV-NMS cloud management platform and mobile APP management. It enables functions such as security network topology management, port management, PoE management, and remote operation and maintenance. It features fast switching capabilities and multiple access ports, making it suitable for LAN devices of all sizes.

FEATURE

■ Gigabit access, uplink SFP fiber port

- ◇ Supports non-blocking wire-speed forwarding.
- ◇ Supports full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- ◇ Supports a combination of Gigabit RJ45 ports and Gigabit SFP fiber ports, which allows users to flexibly build networks and meet the networking needs of various scenarios.

■ Smart PoE power supply

- ◇ Complies with IEEE802.3af/at PoE standard, automatically identifies PoE devices for power supply, and does not damage non-PoE devices.
- ◇ Supports remote PoE management functions, enabling remote power on/off of PoE ports, checking port power status, querying PoE port faults, etc.
- ◇ 4*10/100/1000Base-T RJ45 ports can support PoE power to meet the needs of security monitoring, teleconferencing systems, wireless coverage, and other scenarios.

■ Minimalist application

- ◇ Support remote upgrades, remote reboots, and factory resets.
- ◇ Support real-time fault alarms, fault location, and automatic work order dispatch.
- ◇ Web network management functions: QoS, link aggregation, ring network management, port mirroring, port control, and bandwidth management.
- ◇ Cloud platform + mobile APP operation and maintenance management, providing visualized PoE power supply control, network topology management, and VLAN segmentation.
- ◇ It abandons complex network management configurations, retaining only practical network management functions, enabling rapid network deployment and centralized operation and maintenance through the operation and maintenance platform.

■ Stable and reliable

- ◇ CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicators of PWR, SYS, Link, and PoE.
- ◇ Low power consumption, aluminum alloy housing, and excellent heat dissipation ensure the stable operation of the switch.

TECHNICAL SPECIFICATION

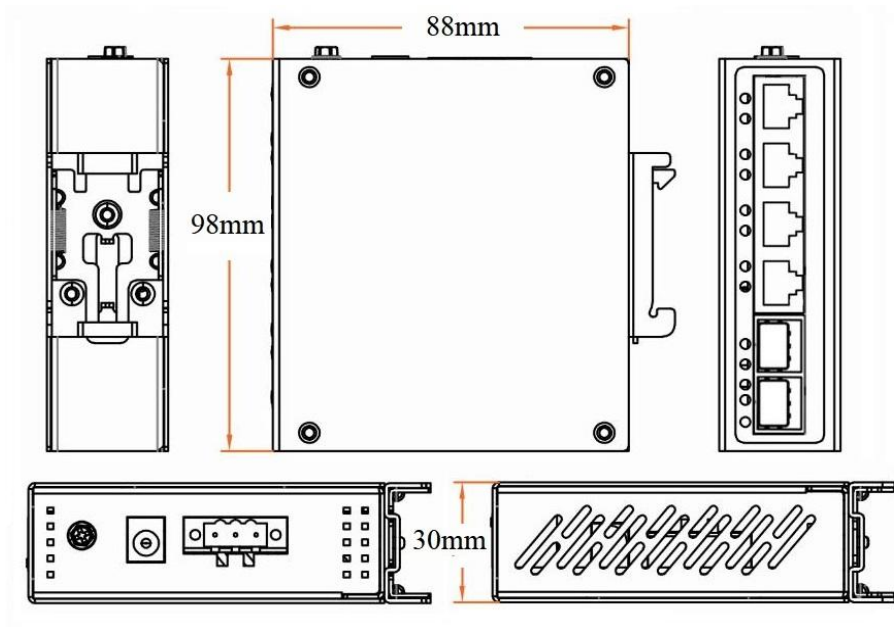
Model	ONV-IPS5064PFM
Interface Characteristics	
Fixed Port	1*DC5521 power socket 2*100/1000Base-X uplink SFP fiber ports (Data) 4*10/100/1000Base-T PoE ports (Data/ Power) 1 set V+, V- (3P Phoenix terminal) DC power interface Dual power interfaces support reverse-connection protection
Ethernet Port	Ports 1-4 support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/ MDI-X self-adaptation
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	Gigabit SFP fiber port, does not include optical module (optional single-mode/ multi-mode, single fiber/ dual fiber optical module, LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, 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, IEEE802.3x
Forwarding Mode	Store and forward (Full wire-speed)
Switching Capacity	12Gbps (non-blocking)

Forwarding Rate@64byte	8.93Mpps
MAC	2K
Buffer Memory	2M
Jumbo Frame	9.2K
LED Indicator	Power/System: SYS (Green), Network: Link (Yellow), PoE: PoE (Red), Fiber port: L/A (Green)
Reset Switch	Press and hold for 6 seconds and release to restore the factory settings. Short press 2 times (1 second interval) to switch to the unmanaged state
PoE& Power Supply	
PoE Port	Port 1-4
PoE Management	Port PoE output on/off, port PoE real-time power status viewing
Power Supply Pin	1/2 (+) 3/6 (-)
Max Power Per Port	30W, IEEE802.3af/at
Power Consumption	Standby<6W, full load af<60W, at<120W
Operation Voltage	DC44-56V
Power Supply	No, optional 48V/60W or 48V/120W 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)	98*88*30mm
Net /Gross Weight	0.25kg/ 0.35kg
Installation	Desktop, 35mm DIN Rail
Certification& Warranty	
Lightning Protection	IEC61000-4-3 (RS):10V/m (80~1000MHz) FCC Part 15/CISPR22 (EN55022): Class A IEC61000-6-2 (Common Industrial Standard) IEC61000-4-9 (Pulsed magnetic field): 1000A/m IEC61000-4-10 (Damped oscillation): 30A/m 1MHz IEC61000-4-12/18 (Shockwave): CM2.5kV, DM1kV

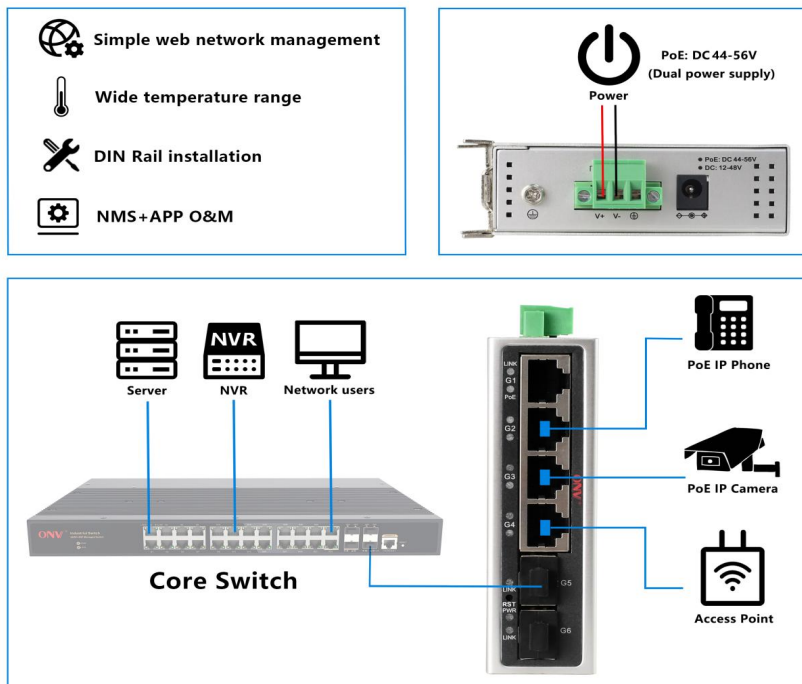
	Protection level: IP30, Lightning protection: 6KV 8/20us IEC61000-4-4(EFT): Power cable: ± 4 kV, data cable: ± 2 kV IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s IEC61000-4-2 (ESD): ± 8 kV contact discharge, ± 15 kV air discharge IEC61000-4-6 (Radio frequency transmission): 10V(150 kHz- 80 MHz) IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s IEC61000-4-5 (Surge): Power cable: CM ± 4 kV/ DM ± 2 kV, data cable: ± 4 kV
Mechanical Properties	IEC 60068-2-6 (Anti vibration), IEC 60068-2-32 (Free fall), IEC 60068-2-27 (Anti shock)
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class A, RoHS
Warranty	5 years, lifelong maintenance.
Network Management Feature	
Interface	IEEE Energy-saving and green Ethernet function Port traffic statistics, IEEE802.3x flow control (Full-duplex) Port status display, Port duplex/ negotiation rate configuration
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, 8*Output queues of each port
Security	Broadcast storm control, Port isolation, Port speed limit
DHCP	DHCP Snooping
Management	Cable status check, Web-based network management One-click restore, Mobile APP maintenance management ONV-NMS platform management (Cloud platform)
System	Web browser: Mozilla Firefox 2.5 or later, Google Chrome 42 or later TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) are installed on each computer in the

network using Category 5 or higher Ethernet cables

DIMENSION



APPLICATION



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS5064PFM	Easy managed industrial PoE switch with 2*100/1000M uplink SFP fiber ports and 4*10/100/1000M RJ45 ports. Ports 1-4 support the IEEE 802.3af/at PoE standard. It supports dual DC power inputs (DC power jack and 3P Phoenix terminal connection) and DIN rail mounting.	60W/120W

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

PACKING LIST

	Content	Qty	Unit
Packing List	6-port Gigabit Easy managed industrial PoE switch	1	PC
	User Guide	1	PC
	Warranty Card and Certificate of Conformity	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. Supports DDM function and hot-plugging.	PC
	2632-G	Industrial 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 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 optical module, 1.25G single-mode single-fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface. Supports DDM function and hot-plugging.	PC
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POWER SUPPLY

Product	Model	Description	Unit
60W DIN Rail industrial power supply	GWS-DP60-48	DIN Rail 60W single-set output power supply Input voltage: AC100V~240V 50-60Hz, 1.0A Output voltage: DC48V, 1.25A Operation temperature: -40℃ to +70℃	PC
120W DIN Rail industrial power supply	GWS-DP120-48	DIN Rail 120W single-set output power supply Input voltage: AC100V~240V 50-60Hz, 2.3A Output voltage: DC48V, 2.5A Operation temperature: -40℃ to +70℃	PC

CONTACT US



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