

Product Datasheet

6-port Gigabit Easy Managed Industrial PoE Switch (ONV-IPS53064PFGM)



OVERVIEW

The ONV-IPS53064PFGM is a Gigabit Easy managed industrial PoE switch independently developed by ONV. It has 5*10/100/1000Base-T adaptive RJ45 ports and 1*100/1000Base-X uplink SFP fiber port. Port 1-4 can support IEEE 802.3 af/at PoE standard and the single-port PoE power up to 30W. As a PoE power supply device, it can automatically detect and recognize the power-receiving equipment that meets the standard and supply power through the network cable. It can supply power to PoE terminal equipment such as wireless AP, IP camera, VoIP, and industrial sensors through the network cable. It also meets the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, power industry, mining, petroleum, and industrial scenes such as shipping, metallurgy, and green energy construction forming a cost-effective, stable, and reliable communication network.

The ONV-IPS53064PFGM supports management via the ONV-NMS cloud platform and the

Cloud Management app, enabling functions such as security network topology management, link aggregation, port management, PoE management, and remote operation and maintenance. It offers high reliability, is easy to install and maintain, features high-speed switching capabilities, and includes multiple access ports, making it suitable for connecting devices in local area networks of all sizes.

FEATURE

■ Gigabit access, uplink SFP fiber 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 SFP fiber port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ Smart PoE power supply

- ◇ Comply with IEEE 802.3 af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.
- ◇ Support remote PoE management function, realize remote power on/off of PoE port, check port power status, query PoE port fault, etc.
- ◇ 4*10/100/1000Base-T RJ45 ports can support PoE power to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

■ Extreme optimization, minimalist application

- ◇ Remote firmware updates, remote reboots, and factory reset.
- ◇ Real-time fault alerts, fault localization, and automatic ticket issuance.
- ◇ Web-based network management features: QoS, link aggregation, ring network management, port mirroring, port control, and bandwidth management.
- ◇ Cloud platform + mobile app for operations and maintenance management, including visual PoE power control, network topology management, and VLAN segmentation.
- ◇ Eliminates complex network management configurations while retaining practical network management features; enables rapid network deployment and centralized

operations and maintenance through the O&M 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 L/A.
- ◇ Low power consumption, aluminum alloy housing, and excellent heat dissipation to ensure the stable operation of the switch.

TECHNICAL SPECIFICATION

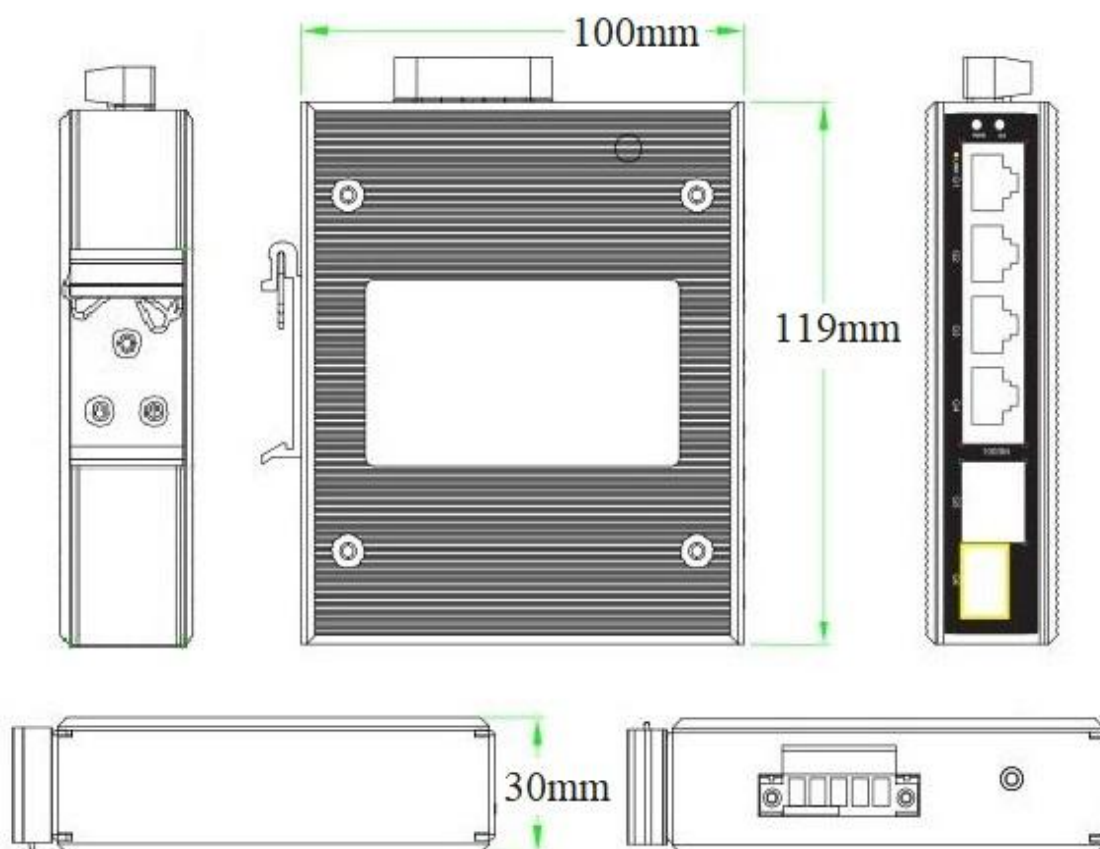
Model	ONV-IPS53064PFGM
Interface Characteristics	
Fixed Port	1*DC5521 power jack 1*10/100/1000Base-T uplink RJ45 port (Data) 1*100/1000Base-X uplink SFP fiber port (Data) 4*10/100/1000Base-T PoE ports (Data/ Power) 2 set V+, V- redundant DC power port (5P Phoenix terminal)
Ethernet Port	Port 1-5 can 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/6 or later UTP (≤100 meters)
Optical Fiber Port	Gigabit optical fiber interface, default no 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 Management Type	L2 (Web management, platform management)

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	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 (Green), Fiber port: L/A (Green)
Reset Switch	Press for 6 seconds and then release to restore to factory settings Short press twice (1 second interval) to switch to unmanaged state
PoE& Power Supply	
PoE Port	Port 1-4
PoE Management	Port PoE output on/off, Port PoE real-time power view
Power Supply Pin	1/2 (+) 3/6 (-)
Max Power Per Port	30W, IEEE 802.3 af/at
Power Consumption	Standby<6W, full load<60W
Input Voltage/ Interface	DC44-57V, 5P industrial Phoenix terminal, and DC5521 power jack. Support reverse connection protection.
Power Supply	No, optional 48V/60W or 48V/120W industrial power supply
Physical Parameter	
Operation Temp/ Humidity	-40°C~+75°C, 5%~90% RH non-condensing
Storage Temp/ Humidity	-40°C~+85°C, 5%~95% RH non-condensing
Dimension (L*W*H)	119*100*30mm
Net /Gross Weight	0.4kg/ 0.5kg
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 magnet field): 1000A/m IEC61000-4-10 (Damped oscillation): 30A/m 1MHz IEC61000-4-12/18 (Shockwave): CM2.5kV, DM1kV Protection level: IP40, Lightning protection: 6KV 8/20us IEC61000-4-4(EFT): Power cable: $\pm 4\text{kV}$, data cable: $\pm 2\text{kV}$ 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(150kHz~80MHz) IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m, 1s-3s IEC61000-4-5 (Surge): Power cable: CM$\pm 4\text{kV}$/ DM$\pm 2\text{kV}$, data cable: $\pm 4\text{kV}$
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
Network Management Feature	
Interface	EEE Energy-saving and green Ethernet function Port traffic statistics, IEEE 802.3x 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 Priority Mark/ Remark, 802.1p/DSCP priority mapping
Security	Broadcast storm control, Port isolation, Port speed limit
DHCP	DHCP Snooping

Management	ONV-NMS platform management (Cloud platform) Mobile APP operation and maintenance management One-key recovery, Cable Diagnose, Web Management
System	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Cat5 and above Ethernet cable TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, Mac OS X) installed on each computer in the network Cat5 and above Ethernet cable

DIMENSION



ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS53064PFGM	Easy managed industrial PoE switch with 1*100/1000M uplink SFP fiber port and 5*10/100/1000M RJ45 ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal or DC power jack 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 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 interface, supports DDM function and hot plugging.	PC
	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 SUPPLY

Product	Model	Description	Unit
60W DIN Rail Industrial Power Supply	GWS-DP60-48	DIN Rail 60W single set of output power supply Input voltage: AC100V~240V 50-60Hz, 1.6A 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 of output power supply Input voltage: AC100V~240V 50-60Hz, 2.3A Output voltage: DC48V, 2.5A Operation temperature: -40℃ to +70℃	PC

RELATED PRODUCT

Model	Description
ONV-IPS53064PFM	Easy managed industrial PoE switch with 2*100/1000M uplink SFP fiber ports and 4*10/100/1000M RJ45 ports. Port 1-4 can support IEEE 802.3

	af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal or DC power jack connection) and DIN Rail mounting.
ONV-IPS53108PFM	Easy managed industrial PoE switch with 2*100/1000M uplink SFP fiber ports and 8*10/100/1000M RJ45 ports. Port 1-8 can support IEEE 802.3 af/at PoE standard. It can support dual DC redundant power input (Phoenix terminal or DC power jack connection) and DIN Rail mounting.

CONTACT US



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