Product Datasheet

6-port Full Gigabit Cloud Managed Industrial PoE Switch

(ONV-IPS53064PFGM)

OVERVIEW

The ONV-IPS53064PFGM is a full Gigabit cloud managed industrial PoE fiber switch independently developed by ONV. It has 5*10/100/1000Base-T adaptive RJ45 ports and 1*100/1000Base-X SFP fiber port. Port 1-4 support IEEE 802.3 af/at PoE standard. Single-port PoE power up to 30W. As a PoE power supply device, it can automatically detect and recognize power-compliant devices that meet 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, and meet 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 can support the ONV-NMS management platform and cloud management APP management. It can realize security network topology management, link aggregation, port management, PoE management, remote operation and

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maintenance, and other functions. The ONV-IPS53064PFGM has high reliability, is easy to install and maintain, has a fast switching function, and has multiple access ports, which are suitable for access to LAN devices of various scales.

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.

■ **Smart PoE power supply**

◇ PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

◇ Comply with IEEE 802.3 af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.

◇ 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**

◇ 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, SYS, Link, L/A, and PoE.

◇ Low power consumption, No fan, aluminum shell, excellent heat dissipation to ensure the stable operation of the switch.

TECHNICAL SPECIFICATION

Model	ONV-IPS53064PFGM
Interface Characteristics	
Fixed Port	1*DC5521 power socket 4*10/100/1000Base-T PoE ports (Data/Power) 1*10/100/1000Base-T uplink RJ45 port (Data) 1*100/1000Base-X uplink SFP fiber port (Data) 2 groups of V+, V- redundant DC power port (5P phoenix terminal)
Ethernet Port	Port 1-5 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/ Distance	Multi-mode: 850nm/ 0-500m Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.
Chip Parameter	
Network Management Type	L2 (Web management, 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	12Gbps
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 and hold for 6 seconds and release to restore the factory default settings, short press 2 times (1 second interval) to switch to the unmanaged state
PoE & Power Supply	
PoE Port	Port 1-4
PoE Management	PoE port output on/off, View real-time power status of PoE port
Power Supply Pin	1/2(+) 3/6 (-)
Max Power Per Port	30W, IEEE 802.3 af/at
Power Consumption	Standby<6W, Full load af<60W, af<120W
Power Input Port	DC48-57V, 5 Pin industrial Phoenix terminal, support anti-reverse 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

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Net /Gross Weight	0.4kg / 0.5kg
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): 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 Properties	IEC60068-2-6 (Anti Vibration), 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 Feature	
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

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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 ONV-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 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

APPLICATION

ORDERING INFORMATION

Model	Description	Recommended Power Supply
ONV-IPS53064PFGM	L2 managed industrial PoE fiber switch with 5*10/100/1000M RJ45 ports and 1*100/1000M uplink SFP fiber port. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input 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 full gigabit cloud managed industrial PoE switch	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

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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, support DDM function, support hot plug and pull.	PC
	2632-G	Industrial SFP 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 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
	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
	2612-T-SC-G	Industrial 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
	2613-R-SC-G	Industrial 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 SUPPLY

Product	Model	Description	Unit
65W Desktop Power Adapter	GWS-AP65-52	Desktop 65W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 1.0A Output Voltage: DC52V, 1.25A Operation Temperature: -20℃ to +65℃	PC

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110W Desktop Power Adapter	GWS-AP110-52	Desktop 110W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 2.3A Output Voltage: DC52V, 2.5A Operation Temperature: -20℃ to +65℃	PC
60W DIN Rail Industrial Power Supply	GWS-DP60-48	DIN Rail 60W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 1.1A 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	L2 managed industrial PoEfiber switch with 4*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.
ONV-IPS53108PFM	L2 managed industrial PoE fiber switch with 8*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber ports. Port 1-8 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.

CONTACT US

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