

Product Datasheet

10-port Gigabit Easy Managed PoE Switch

(ONV-H53108PFMA)



OVERVIEW

The ONV-H53108PFMA is a Gigabit Easy managed PoE 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. Ports 1-8 can support the IEEE 802.3af/at PoE standard, and single-port PoE power is 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 phone, building visual access control intercom, etc., through the network cable, to meet the network environment that needs a high-density PoE power supply. It suits hotels, campuses, factory dormitories, and small and medium-sized enterprises to form cost-effective networks.

The ONV-H53108PFMA can support Web management, ONV-NMS cloud management platform, and cloud APP management. Supports the ring network protocol RSTP (<50ms) to enhance link redundancy and network reliability, reduce the number of fiber splicing operations and network nodes, and improve construction efficiency. When a unidirectional network fails, communication can be quickly restored to ensure uninterrupted communication of important transmissions. It can manage security network topology, VLAN settings, port management, PoE management, remote operation and maintenance,

and other functions. It has high reliability, easy installation and maintenance, fast switching function, and multiple access ports, suitable for access to LAN devices of various sizes.

FEATURE

■ Gigabit access, uplink SFP fiber port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x 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 IEEE802.3af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.
- ◇ Support remote PoE management, enabling remote on/off of each PoE port, viewing of port power status, and PoE port fault query.
- ◇ 8*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 real-time fault alarms and fault location.
- ◇ Support remote upgrades, remote reboots, and factory resets.
- ◇ Web-based network management functions: QoS, link aggregation, ring network management, port mirroring, port control, and bandwidth management.
- ◇ Cloud platform and mobile APP operation and maintenance management: 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, galvanized steel housing, and excellent heat dissipation to ensure the stable operation of the switch.

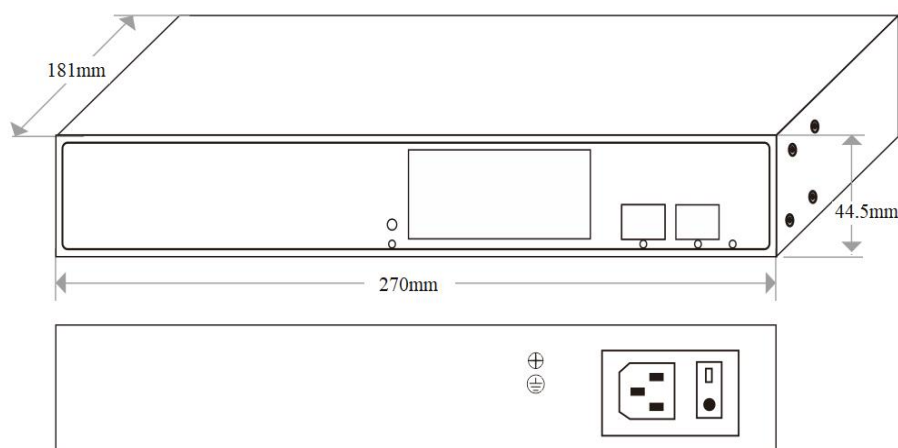
TECHNICAL SPECIFICATION

Model	ONV-H53108PFMA
Interface Characteristics	
Fixed Port	8*10/100/1000Base-T PoE ports (Power/ Data) 2*100/1000Base-X uplink SFP fiber ports (Data)
Ethernet Port	Ports 1-8 can support 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 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	No optical module included (optional single/multi-mode, single/dual fiber modules, 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	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 (non-blocking)

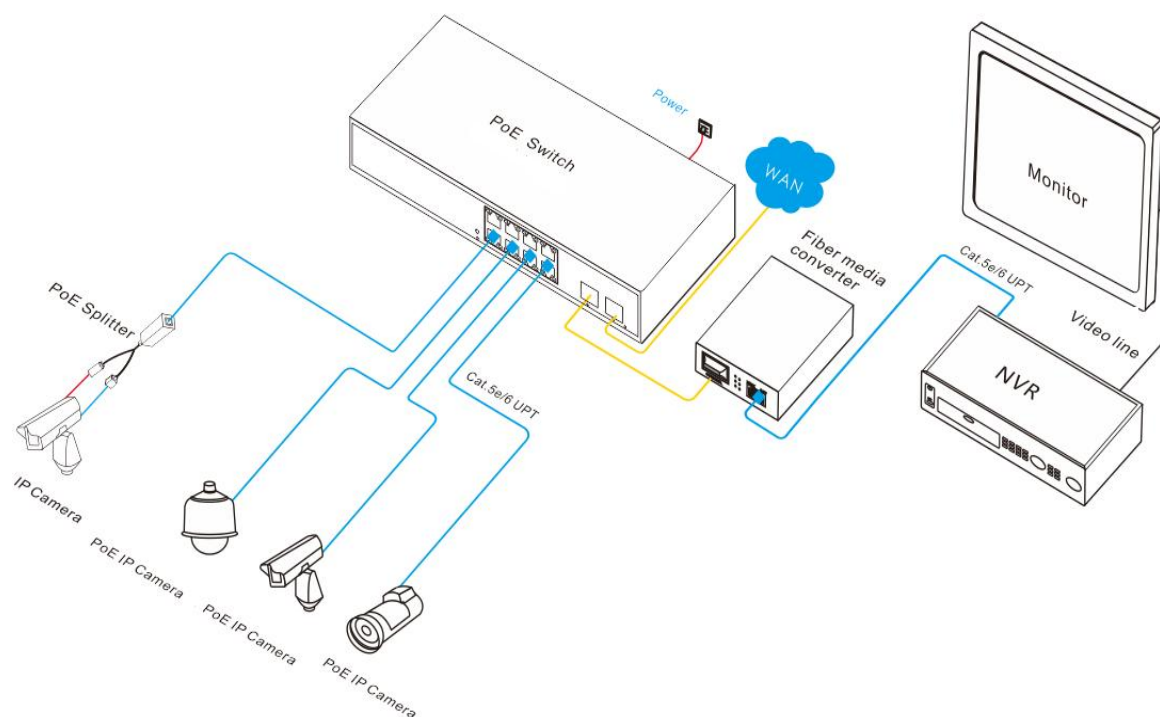
Forwarding Rate@64byte	14.88Mpps
MAC	8K
Buffer Memory	2M
Jumbo Frame	9.2K
LED Indicator	Power: PWR (Green), System: SYS (Green), Network: Link (Yellow), Fiber port: L/A(Green)
Reset Switch	Press and hold for 6 seconds and release to restore factory settings; short-press twice (1 second apart) to switch to unmanaged mode.
PoE& Power Supply	
PoE Port	Port 1-8
PoE Management	Port PoE output on/off, Port PoE working status display
Power Supply Pin	1/2(+) 3/6(-)
Max Power Per Port	30W, IEEE802.3af/at
Total PWR/ Input Voltage	120W/ (AC100-240V)
Power Consumption	Standby<5W, full load<120W
Power Supply	Built-in power supply, AC100~240V 50-60Hz, 2.0A
Physical Parameter	
Operation Temp/ Humidity	-20°C~+55°C, 5%~90% RH non-condensing
Storage Temp/ Humidity	-40°C~+80°C, 5%~95% RH non-condensing
Dimension (L*W*H)	270*181*44.5mm
Net /Gross Weight	1.3kg/ 1.8kg
Installation	Desktop, wall mount, 1U/19" cabinet
Certification& Warranty	
Lightning Protection	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15, RoHS
Warranty	1 year, 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
Multicast	IGMP Snooping v1/v2, Max 256 multicast groups
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	Cable status check, Web Management, SNMP V1/V2C Mobile APP operation and maintenance management One-key recovery, ONV-NMS cloud platform 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



APPLICATION



ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV-H53108PFMA	Easy managed PoE switch with 8*10/100/1000M RJ45 ports and 2*100/1000M uplink SFP fiber ports. Ports 1-8 can support the IEEE 802.3af/at PoE standard. It built-in power supply and 1U/19" cabinet mount.	120W

Note: The optical module is not included and needs to be purchased.

PACKING LIST

Packing List	Content	Qty	Unit
	10-port Gigabit Easy managed PoE switch	1	PC
	AC Power Cable	1	PC
	Mounting Kit (Mounting Ears)	1	Pair
	User Guide	1	PC
	Warranty Card and Certificate of Conformity	1	PC

OPTICAL MODULE

Product	Model	Description	Unit
1.25G Optical Module	2630	SFP optical module, 1.25G multi-mode dual fiber 850nm, transmission distance: 550m, LC interface. support DDM function and hot plugging.	PC
	2632	SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface. support DDM function and hot plugging.	PC
	2612-T	SFP optical module, 1.25G single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface. support DDM function and hot plugging.	PC
	2613-R	SFP optical module, 1.25G single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, LC interface. support DDM function and hot plugging.	PC
	2612-T-SC	SFP optical module, 1.25G single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, SC interface. support DDM function and hot plugging.	PC
	2613-R-SC	SFP optical module, 1.25G single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, SC interface. support	PC

		DDM function and hot plugging.	
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

CONTACT US



Optical Network Video Technologies (Shenzhen) Co., Ltd.

Tel: 0086-755-33376606

Fax: 0086-755-33376608

WeChat: ONV-PoE-IoT

Email: onv@onv.com.cn

Skype: onv@onv.com.cn

Teams: onv@onv.com.cn

Website: www.onvcom.com

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

Factory Address: Building B3, Galaxy Artificial Intelligence Industrial Park, No. 333,

Zhongkai 6th Road, Chenjiang Street, Zhongkai High-tech Zone, Huizhou

