Product Datasheet

11-port Gigabit Easy Managed PoE Switch

(ONV-H53108PFDM)

OVERVIEW

The ONV-H53108PFDM is a Gigabit Easy managed PoE switch independently developed by ONV. It features 8*10/100/1000Base-T adaptive RJ45 ports and 2*10/100/1000Base-T uplink RJ45 ports and 1*100/1000Base-X SFP fiber port. Ports 1–8 support the IEEE 802.3af/at PoE standard, with a power output of up to 30W per port. As a power sourcing equipment device, it automatically detects and identifies standards-compliant Powered Devices and supplies power to them via Ethernet cables. It can power PoE-enabled terminal devices—such as wireless access points, IP cameras, VoIP phones, and video intercom systems—making it an ideal, cost-effective networking solution for environments requiring high-density PoE deployment, including hotels, campuses, factory dormitories, and small-to-medium-sized businesses.

The ONV-H53108PFDM supports Web management, the ONV-NMS cloud management platform, and a mobile app. It utilizes the Rapid Spanning Tree Protocol (RSTP, with convergence < 50 ms) to enhance link redundancy and network reliability, while reducing

the need for fiber splicing and minimizing network nodes to improve deployment efficiency. In the event of a unidirectional network failure, the switch can rapidly restore communication, ensuring uninterrupted transmission for critical data. It offers features such as security, network topology management, VLAN configuration, port management, PoE management, and remote operation and maintenance. Highly reliable and easy to install and maintain, this switch provides high-speed switching capabilities and multiple access ports, making it suitable for connecting devices in local area networks of various scales.

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

- Support remote PoE management, enabling remote on/off of each PoE port, viewing of port power status, and PoE port fault query.
- Comply with the IEEE 802.3 af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.
- 8*10/100/1000Base-T RJ45 ports 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 for PWR, SYS, Link, and PoE.

◇ Low power consumption, galvanized steel housing, and excellent heat dissipation ensure the stable operation of the switch.

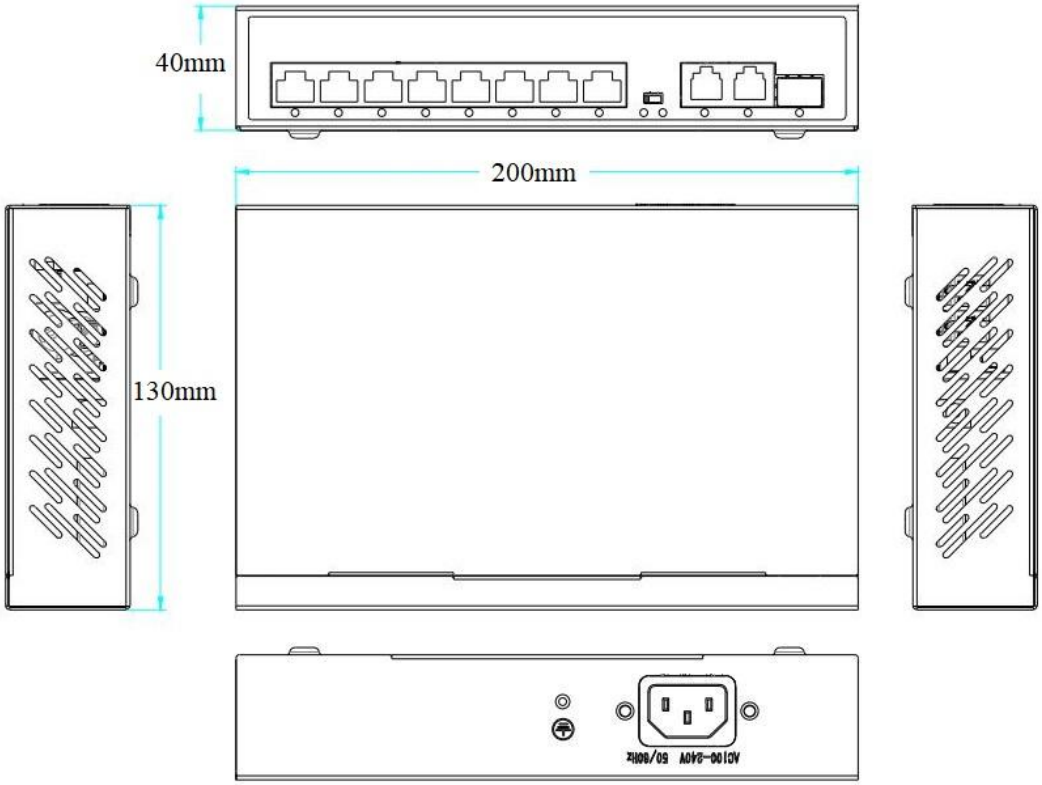
TECHNICAL SPECIFICATION

Model	ONV-H53108PFDM
Interface Characteristics	
Fixed Port	2*10/100/1000Base-T RJ45 ports (Data) 1*100/1000Base-X uplink SFP fiber port (Data) 8*10/100/1000Base-T PoE ports (Power/ Data)
Ethernet Port	Ports 1-8 support 10/100/1000Base-T(X) 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; optical module not included (optional single-mode/ multi-mode, single-fiber/dual-fiber modules, LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.
Chip Parameter	
Network Management	L2 (Web management, platform management)

Type	
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	22Gbps (non-blocking)
Forwarding Rate@64byte	16.37Mpps
MAC	2K
Buffer Memory	2M
Jumbo Frame	9.2K
LED Indicator	Power/System: SYS (Green), Fiber: L/A (Green), Network: Link (Green), POE: PoE (Red)
Reset Switch	Slide the DIP switch from left to right, hold for 1–3 seconds, then slide it back from right to left; this performs a reset. Positioned to the left: Web (management mode); positioned to the right: unmanaged mode.
PoE& Power Supply	
PoE Port	Port 1-8
PoE Management	Port PoE output on/off, Port PoE operating status display
Power Supply Pin	1/2(+) 3/6(-)
Max Power Per Port	30W, IEEE 802.3 af/at
Total PWR/ Input Voltage	100W/ (AC100-240V)
Power Consumption	Standby<6W, full load<100W
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)	200*130*40mm
Net /Gross Weight	<0.8kg/ <1.2kg
Installation	Desktop, wall mount

Certification& Warranty	
Lightning Protection	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CE, FCC, RoHS
Warranty	1 year, lifelong maintenance
Network Management Feature	
System Management	IP settings, Account management, Port traffic settings, System information display
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	ONV-NMS Platform management(Cloud Platform) Mobile APP operation and maintenance management Cable status check, Web Management, One-key recovery
System	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome 42 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-H53108PFDM	Easy managed PoE switch with 10*10/100/1000M RJ45 ports and 1*100/1000M uplink SFP fiber port. Ports 1-8 support the IEEE 802.3 af/at PoE standard. It has a built-in power supply and supports desktop and wall-mount.	100W
Note: The optical module is not included and needs to be purchased.		

PACKING LIST

	Content	Qty	Unit
Packing List	11-port Gigabit Easy managed PoE switch	1	PC
	AC Power Cable	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	SFP optical module, 1.25G multi-mode dual fiber 850nm, transmission distance: 550m, LC interface. Supports DDM function and hot-plugging.	PC
	2632	SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface. Supports DDM function and hot-plugging.	PC
	2612-T	SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC interface. Supports	PC

		DDM function and hot-plugging.	
	2613-R	SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface. Supports DDM function and hot-plugging.	PC

CONTACT US

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