

## Product Datasheet

# 10-port Full Gigabit L2 E Managed PoE Switch (ONV-H5108PFM)



## OVERVIEW

The ONV-H5108PFM is a Gigabit L2 e managed PoE fiber switch independently developed by ONV. It has 8\*10/100/1000Base-T adaptive RJ45 ports and 2\*1000Base-X SFP ports. Port 1-8 can support IEEE 802.3 af/at PoE standard. 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 network cable, to meet the network environment that needs high-density PoE power supply. It is suitable for hotels, campuses, factory dormitories and SMB small and medium-sized enterprises to form cost-effective networks.

The ONV-H5108PFM support WEB management, and support ONV-NMS management platform and cloud APP management at the same time. Multiple ring network protocols RSTP (<50ms) improve link backup and network reliability, reduce the number of spliced fibers and network nodes, improve construction efficiency, and when the one-way network fails, communication can be quickly restored to ensure uninterrupted communication of important transmissions. It can realize functions such as security network topology management, link aggregation, port management, port mirroring and remote operation and maintenance. The ONV-H5108PFM switch has high reliability, is easy to install and

maintain, has fast switching function, and multiple access ports, and is suitable for accessing LAN devices of various scales.

## FEATURE

### ■ Gigabit access, Dual SFP 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.

### ■ Intelligent PoE power supply

- ◇ IEEE802.3af/at PoE standard, without damaging non-PoE devices.
- ◇ Remote PoE management function, realizing remote switch of PoE port, port power status check, POE port fault query function, etc.
- ◇ Priority system for PoE port, it will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- ◇ 8\*10/100/1000Base-T RJ45 support PoE power, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

### ■ Extreme optimization, minimalist application

- ◇ Support remote upgrade, remote restart, restore factory settings.
- ◇ Support real-time fault alarm, fault location, automatic order dispatch.
- ◇ Support local platform, cloud platform and mobile APP O&M management.
- ◇ Visual network topology management, VLAN division, QoS, link aggregation, loop protection, port mirroring, PoE control, port control and bandwidth management.
- ◇ According to the application requirements, the complex network management configuration is abandoned, and the practical network management functions are retained. The network deployment and centralized O&M can be quickly realized through the O&M platform.

### ■ Stable and reliable

- ◇ CCC, CE, FCC, and RoHS.
- ◇ Low power consumption, galvanized steel casing, no fan.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A, P.

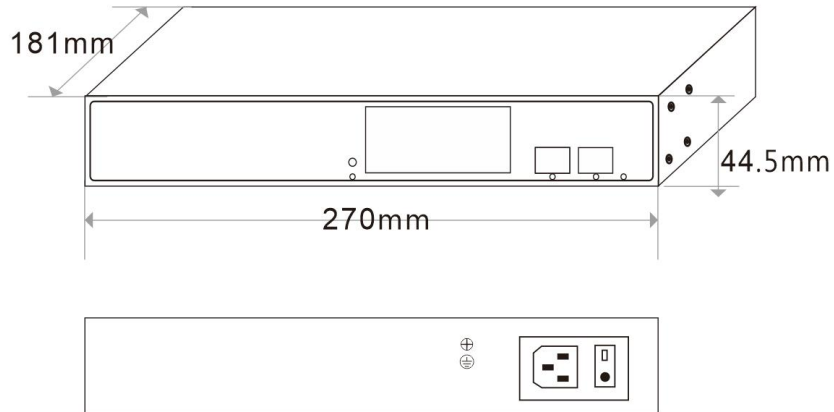
## TECHNICAL SPECIFICATION

| Model                            | ONV-H5108PFM  |
|----------------------------------|---|
| <b>Interface Characteristics</b> |   |
| Fixed Port                       | 2*1000Base-X SFP ports(Data)<br>8*10/100/1000Base-T PoE ports (Power/Data)  |
| Ethernet Port                    | Port 1-8 support 10/100/1000Base-T(X) auto-sensing, full/half duplex<br>MDI/MDI-X self-adaption   |
| Twisted Pair<br>Transmission     | 10BASE-T: Cat3,4,5 UTP(≤100 meters)<br>100BASE-TX: Cat5 or later UTP(≤100 meters)<br>1000BASE-T: Cat5e or later UTP(≤100 meters)                              |
| SC Slot Port                     | Gigabit SFP optical fiber interface, default no include optical modules<br>(optional single-mode/ multi-mode, single fiber/ dual fiber optical module.<br>LC) |
| Optical Cable/<br>Distance       | Multi-mode: 850nm / 0-500m, Single-mode:1310nm / 0-40km, 1550nm /<br>0-120km.   |
| <b>Chip Parameter</b>            |   |
| Network<br>Management Type       | L2 (WEB management, platform management)  |
| Network Protocol                 | IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX<br>IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x                                   |
| Forwarding Mode                  | Store and Forward(Full Wire Speed)  |

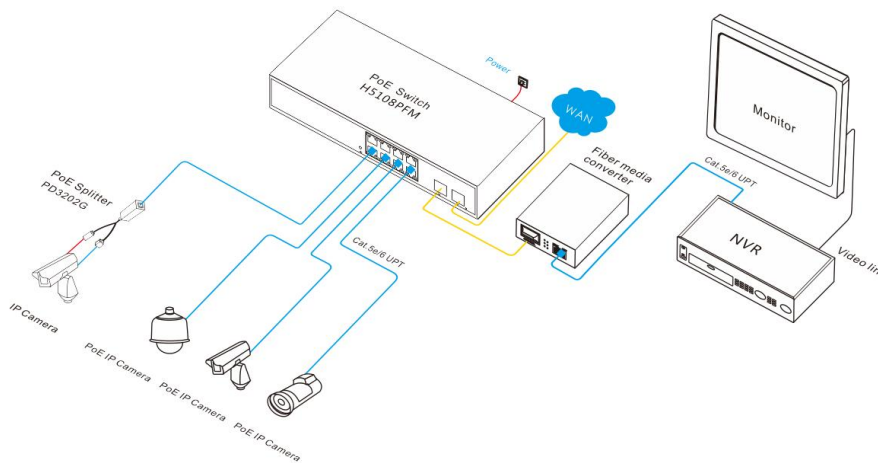
|                           |   |
|---------------------------|---|
| Switching Capacity        | 20Gbps (Non-blocking)   |
| Forwarding Rate@64byte    | 14.88Mpps   |
| MAC                       | 8K  |
| Buffer Memory             | 2M  |
| Jumbo Frame               | 9.2Kbytes   |
| LED Indicator             | Power: PWR(Green), System: SYS(Green), Network: Link (Yellow) Fiber port: L/A(Green)  |
| Reset Switch              | Press and hold for 6s and release to restore the factory settings, short press 2 times (1s interval) to switch to the unmanaged state |
| <b>Power Supply</b>       |   |
| PoE Port                  | Port 1 to 8, IEEE 802.3 af/at   |
| PoE Management            | PoE working status display, Port PoE on/off   |
| Power Supply Pin          | 1/2(+) 3/6(-)   |
| Max Power Per Port        | 30W, IEEE 802.3 af/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  |
| <b>Physical Parameter</b> |   |
| 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         | <1.7kg / <2.2kg   |
| Installation              | Desktop, Wall-mount, Rack-mount   |

| <b>Certification &amp; Warranty</b> |   |
|-------------------------------------|---|
| Lightning Protection                | Lightning protection: 4KV 8/20us, Protection level: IP30  |
| Certification                       | CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS   |
| Warranty                            | 1 year, lifelong maintenance.   |
| <b>Network Management Features</b>  |   |
| Interface                           | Port status display, Port traffic statistics<br>Port duplex/negotiation rate configuration<br>EEE Energy-saving and green Ethernet function<br>IEEE802.3x flow control configuration (Full-duplex)  |
| VLAN                                | Port-based IEEE802.1Q VLAN configuration (4K)   |
| Port Aggregation                    | Static aggregation  |
| Loop Protection                     | Loop protection function, Prevent ring network failure function   |
| Multicast                           | IGMP Snooping v1/v2, Max 256 multicast groups   |
| Port Mirroring                      | Bidirectional data mirroring based on port  |
| QoS                                 | Diff-Serv QoS, Priority Mark/Remark<br>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<br>ONV-NMS platform management (Local platform/Cloud platform)<br>One-key recovery, Cable Diagnose, Web Management (HTTPS)  |
| System                              | Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Category 5 and above Ethernet cables<br>TCP/IP, network adapter, and network operating systems (Such as Microsoft Windows, Linux or Mac OSX) are installed on each computer in the network with Category 5 and above Ethernet cables |

## DIMENSION



## APPLICATION



## ORDERING INFORMATION

| Model        | Description  | Power Supply |
|--------------|--|--------------|
| ONV-H5108PFM | L2 e managed PoE switch with 8*10/100/1000M RJ45 ports and 2*1000M SFP ports. Port 1-8 support IEEE 802.3 af/at PoE standard. It support desktop and wall-mount. | 120W         |

## PACKING LIST

|              | Content                                      | Qty | Unit |
|--------------|--|-----|------|
| Packing List | 10-port full Gigabit L2 e managed PoE switch | 1   | SET  |
|              | AC Power Cable                               | 1   | PC   |
|              | User Guide                                   | 1   | PC   |
|              | Warranty Card                                | 1   | PC   |

## RELATED PRODUCT

| Model           | Description  |
|-----------------|--|
| ONV-H5064FM-4DC | L2 e managed ring network switch with 4*10/100/1000M RJ45 ports and 2*1000M SC ports (default single-mode single fiber A and B terminal). It support 4*DC12V output. Built-in power supply. It support desktop and wall-mount. |
| ONV-H5064PFM    | L2 e managed PoE switch with 4*10/100/1000M RJ45 ports and 2*1000M SC ports (default single-mode single fiber A and B terminal). Port 1-4 support IEEE 802.3 af/at PoE standard. It support desktop and wall-mount.            |

## CONTACT US

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

Tel: 0086-755-33376606

Fax: 0086-755-33376608

Website: [www.onvcom.com](http://www.onvcom.com)

WeChat ID: ONV-PoE-IoT

Email: [onv@onv.com.cn](mailto:onv@onv.com.cn)

Skype: [onv@onv.com.cn](https://www.skype.com/people/onv@onv.com.cn)

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

Factory Address: The 4-6th Floor, No. 59, Huaning Road, Xinwei Community, Dalang Street, Longhua District, Shenzhen, China

