

Product Datasheet

52-port Gigabit Managed PoE Switch

(ONV-POE33052PFM)



OVERVIEW

The ONV-POE33052PFM is a Gigabit managed PoE switch independently developed by ONV. It has 48*10/100/1000Base-T adaptive RJ45 ports and 4*100/1000Base-X uplink SFP fiber ports. Port 1-48 can support IEEE 802.3 af/at PoE standard and single-port PoE power up to 30W. As a PoE power supply device, it can automatically detect and identify powered devices that meet standards and power them through network cables. It can power PoE terminal equipment such as wireless AP, IP camera, Internet telephone, and building visual access control intercoms through network cables to meet network environments that require high-density PoE power supply. It is suitable for hotels, campuses, parks, supermarkets, scenic spots, factory dormitories, and small and medium-sized enterprises to establish cost-effective networks.

The ONV-POE33052PFM has L2+ network management functions. It can support IPV4 management and static routing forwarding, complete security protection mechanisms, complete ACL/ QoS policies, and rich VLAN functions, making it easy to manage and maintain. Supports multiple network redundancy protocols RSTP (<50ms) to improve link backup and network reliability. When a one-way network fails, communication can be quickly restored to ensure uninterrupted communication of important transmissions. According to application needs, PoE power supply management, port flow control, VLAN division, QoS, and other application service configurations can be performed through network management methods such as Web, CLI, SNMP, and Telnet.

FEATURE

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

■ Smart PoE power supply

- ◇ Support PoE network management function, port power status viewing, etc. through network management configuration.
- ◇ Comply with IEEE 802.3 af/at PoE power supply standard, automatically identify PoE equipment for power supply.
- ◇ 48*10/100/1000Base-T RJ45 ports support PoE power to meet the power supply needs of security monitoring, conference call systems, wireless coverage, and other scenarios.

■ Strong business processing capability

- ◇ Support IEEE 802.1Q VLAN.
- ◇ Ring network RSTP spanning tree protocol eliminates layer 2 loops and realizes link backup.
- ◇ Support IGMP Snooping V1/V2 to meet the needs of multi-terminal high-definition video surveillance and video conferencing access.
- ◇ Support QoS, three priority modes based on port, 802.1P-based and DSCP-based, and four queue scheduling algorithms: SP, WRR, and WFQ.
- ◇ Static aggregation and dynamic aggregation effectively increase link bandwidth, achieve load balancing, and link backup, and improve link reliability.
- ◇ Support ACL to filter data packets by configuring matching rules, processing operations, and time permissions to provide flexible security access control strategies.

■ Security

- ◇ Port isolation and storm control.
- ◇ 802.1X authentication provides authentication functions for LAN computers and controls the authorization status of controlled ports according to the authentication results.

■ Stable and reliable

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly panel can show the device status through the LED indicator of PWR, PoE, and Link.
- ◇ Using self-developed power supply with high redundancy design provides long-term and stable PoE power output.
- ◇ Low power consumption, with fan, galvanized steel metal housing, and excellent heat dissipation to ensure the stable operation of the switch.

■ Easy O&M management

- ◇ CPU monitoring, memory monitoring and Ping detection.
- ◇ System logs, and port traffic statistics facilitate network optimization and transformation.
- ◇ LLDP facilitates the network management system to query and determine the communication status of the link.
- ◇ Web network management, CLI (Console, Telnet), SNMP (V1/V2/V3), Telnet and other diversified management and maintenance methods.

TECHNICAL SPECIFICATION

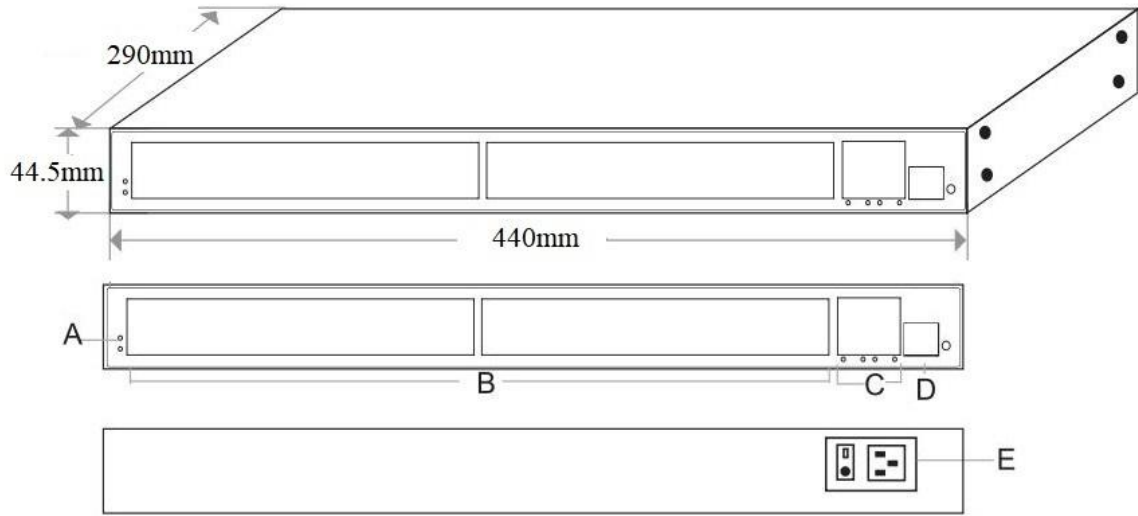
| Model | ONV-POE33052PFM |
|----------------------------------|---|
| Interface Characteristics | |
| Fixed Port | 1*Console RS232 port (115200,N,8,1) 4*100/1000Base-X uplink SFP fiber ports (Data) 48*10/100/1000Base-T PoE ports (Data /Power) |

| | |
|-------------------------------|--|
| Ethernet Port | Port 1-48 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 | 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+ |
| 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 | 104Gbps (non-blocking) |
| Forwarding Rate @64byte | 77.38Mpps |
| CPU | 750MHz |
| DRAM | 1G |
| FLASH | 256M |
| MAC | 16K |
| Buffer Memory | 12M |
| LED Indicator | Power: PWR (Yellow), System: SYS (Yellow), Network: Link/Act (Yellow), PoE: PoE (Green), Fiber port: L/A(Green) |
| PoE & Power Supply | |
| PoE Port | Port 1-48 |
| PoE Management | Port PoE working status display, Port PoE output power distribution, PoE on/off, af/at power distribution |

| | |
|-------------------------------------|--|
| Power Supply Pin | 1/2(+) 3/6 (-) |
| Max Power Per Port | 30W, IEEE 802.3 af/at |
| Total PWR / Input Voltage | 600W/ (AC100-240V) |
| Power Consumption | Standby<22W, Full Load<600W |
| Power Supply | Built-in power supply, AC100~240V 50-60Hz, 6.6A |
| Physical Parameter | |
| Operation TEMP/ Humidity | -20°C~+55°C, 5%~90% RH Non condensing |
| Storage TEMP/ Humidity | -40°C~+75°C, 5%~95% RH Non condensing |
| Dimension (L*W*H) | 440*290*44.5mm |
| Net /Gross Weight | 4.8kg / 5.7kg |
| Installation | Desktop, 1U/19" cabinet |
| Certification & Warranty | |
| 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 | 3 years, lifelong maintenance. |
| Network Management Feature | |
| Interface | IEEE802.3x flow control (Full duplex) Broadcast storm suppression based on port rate Port real-time traffic management (Flow Interval) Limit the rate of packet traffic on incoming and outgoing ports, mini granularity is 16Kbps and max is 1Gbps |
| L3 Feature | IPV4 static route/ default route |
| VLAN | Port-based VLAN (4K), VLAN based on the protocol IEEE802.1q, Port configuration of Access, Trunk, Hybrid |
| Port Aggregation | LACP dynamic aggregation, Static aggregation Max 26 aggregation groups and 8 ports per group |

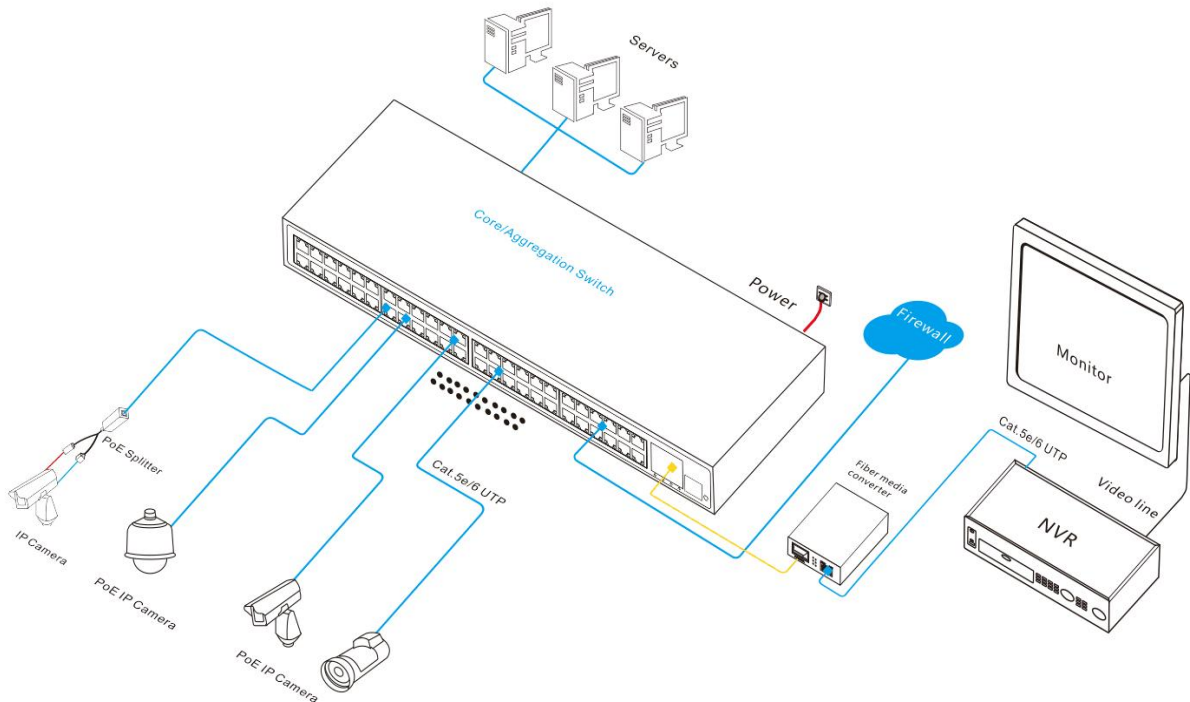
| | |
|----------------|--|
| Spanning Tree | RSTP (IEEE 802.1w) |
| ERPS | ERPSv2 |
| Multicast | Multicast VLAN, User quick exit mechanism, IGMP Snooping v1/v2 |
| Port Mirroring | Bidirectional data mirroring based on port |
| QoS | 802.1p/ DSCP priority mapping, Diff-Serv QoS Queue scheduling algorithm (SP, WRR, WFQ) Flow-based rate limiting, Flow-based packet filtering Flow-based based redirection, 8*Output queues of each port |
| ACL | Port-based and VLAN-delivered ACL The L2-L4 packet filtering function can match the first 80 bytes of the packet and provide information based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range to define the ACL. |
| Security | Port isolation, Port broadcast message suppression Port-based and Mac-based IEEE802.1X certification User hierarchical management and password protection AAA&RADIUS certification, IP source address protection |
| DHCP | DHCP Client, DHCP Snooping |
| Management | Web network management (https), Ping detection ONV-NMS platform cluster management (LLDP+SNMP) One click recovery, View CPU real-time utilization status Link Layer Discovery Protocol (LLDP), System work log Console/ Telnet and CLI configuration, SNMP V1/V2/V3 NTP clock, HTTP file upload and download 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



- A. Working indicator
- B. 48*10/100/1000M PoE ports
- C. 4*100/1000M uplink SFP fiber ports
- D. Console port
- E. Power input port AC100-240V, 50/60Hz

APPLICATION



ORDERING INFORMATION

| Model | Description | Built-in Power Supply |
|-----------------|---|-----------------------|
| ONV-POE33052PFM | L2+ managed PoE switch with 48*10/100/1000M RJ45 ports and 4*100/1000M uplink SFP fiber ports. Port 1-48 can support IEEE 802.3 af/at PoE standard. It built-in power supply and 1U/19" cabinet installation. | 600W |

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

PACKING LIST

| | Content | Qty | Unit |
|--------------|---|-----|------|
| Packing List | 52-port gigabit managed PoE switch | 1 | Set |
| | AC Power Cable | 1 | PC |
| | RJ45-DB9 Adapter Cable | 1 | PC |
| | Mounting Kit (Hanging Ear) | 1 | Set |
| | 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 DDM function and hot plugging. | PC |
| 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

Email: onv@onv.com.cn

Skype: onv@onv.com.cn

WeChat ID: ONV-PoE-IoT

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

