

Product Datasheet

26-port Gigabit L2+ Managed PoE Switch (ONV-POE33026PFM)



OVERVIEW

The ONV-POE33026PFM is a gigabit L2+ managed PoE fiber switch independently developed by ONV. It has 24*10/100/1000Base-T adaptive RJ45 ports and 4*100/1000Base-X uplink SFP fiber (including 2 combo ports). Port 1-24 can support IEEE 802.3 af/at PoE standard and single-port PoE power reaches 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, webcam, VoIP phone, building visual access control intercom through the network cable, to meet the network environment that needs high-density PoE power supply, suitable for hotels, campuses, parks, supermarkets, scenic spots, factory quarters and small and medium-sized enterprises form a cost-effective network.

The ONV-POE33026PFM has L2+ network management function, supports IPV4/ IPV6 management, software static routing forwarding, complete security protection mechanism, perfect ACL/ QoS strategy, and rich VLAN functions, and is easy to manage and maintain. Support various network redundancy protocols STP/ RSTP/ MSTP (< 50ms) and (ITU-R T G. 8032) ERPS (< 20ms) to improve link backup and network reliability. When the one-way network fails, it can quickly restore communication and ensure the uninterrupted communication of important transmission. PoE power supply management, port flow control, VLAN division, QoS, and other functions are configured according to the actual application needs through Web, CLI, SNMP,

Telnet, and other network management methods.

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 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.
- ◇ 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.
- ◇ 24*10/100/1000Base-T RJ45 ports support PoE power supply to meet the PoE power supply requirements of security monitoring, teleconference system, wireless coverage, and other scenarios.

■ Security

- ◇ Port isolation and storm control.
- ◇ IP+MAC+port+VLAN quadruple flexible combination binding function.
- ◇ 802.1X authentication provides authentication functions for LAN computers and controls the authorization status of controlled ports according to the authentication results.

■ Strong business processing capability

- ◇ Support ERPS ring network and STP/ RSTP/ MSTP to eliminate layer 2 loops and realize link backup.
- ◇ Support IEEE802.1Q VLAN, Users can flexibly divide VLAN, Voice VLAN, and QinQ

configuration according to their needs.

- ◇ Support static and dynamic aggregation to effectively increase link bandwidth, realize load balancing, link backup, and improve link reliability.
- ◇ Support QoS, port-based, 802.1P-based, and DSCP-based three priority modes and four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.
- ◇ Support ACL to filter data packets by configuring matching rule processing operations and time permissions, and provide flexible security access control policies.
- ◇ Support IGMP V1/V2/V3 multicast protocol, IGMP Snooping meets multi-terminal high-definition video surveillance and video conference access requirements.

■ **Stable and reliable**

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

■ **Easy O&M management**

- ◇ Support CPU monitoring, memory monitoring, Ping detection, and cable length detection.
- ◇ HTTPS, SSLV3, SSHV1/V2, and other encryption methods are more secure in management.
- ◇ RMON, system log, and port traffic statistics are convenient for network optimization and transformation.
- ◇ LLDP is convenient for the network management system to query and judge the communication status of the link.
- ◇ Support diverse management and maintenance methods such as Web network management, CLI command line (Console, Telnet), SNMP (V1/V2/V3), Telnet, etc.

TECHNICAL SPECIFICATION

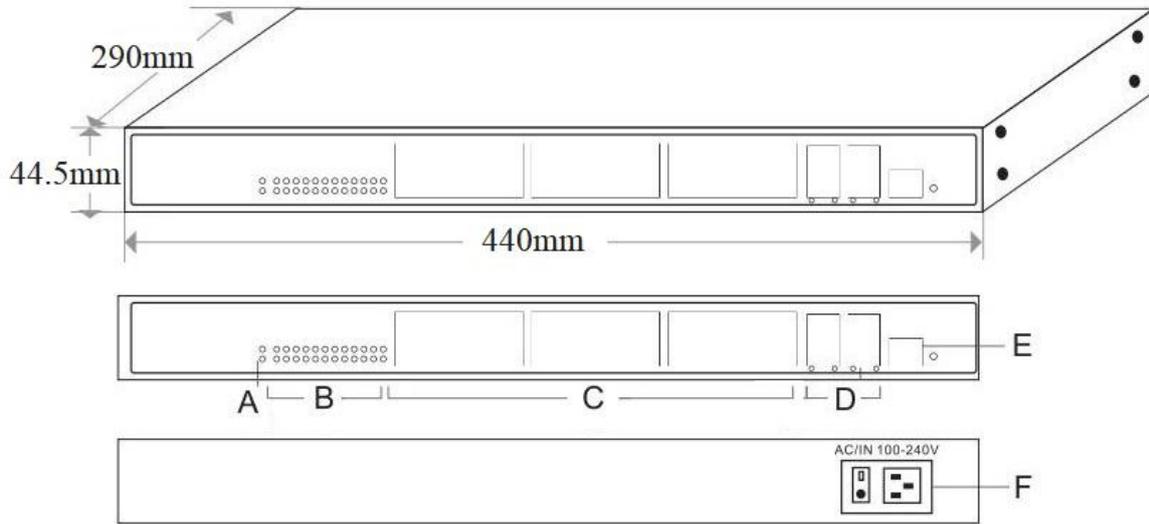
Model	ONV-POE33026PFM	ONV-POE33026PFM-at
Interface Characteristics		
Fixed Port	1*RS232 console port (115200,N,8,1)	
	24*10/100/1000Base-T PoE ports (Data/Power)	
	4*100/1000Base-X uplink SFP fiber ports (including 2 combo ports) (Data)	
Ethernet Port	Port 1-24 support 10/100/1000Base-T(X) auto-sensing, 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/ 0-500m, 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	52Gbps (non-blocking)	
Forwarding Rate @64byte	38.69Mpps	
CPU	500MHz	
DRAM	1G	
FLASH	128M	
MAC	8K	

Buffer Memory	8M	
Jumbo Frame	9.6K	
LED Indicator	Power: PWR(Yellow), System: SYS(Yellow), Network: Link (Yellow), PoE: PoE (Green), Fiber port: L/A (Green)	
Reset Switch	Yes, press and hold the switch for 10 seconds and release it to restore the factory settings	
PoE & Power Supply		
PoE Port	Port 1-24	
PoE Management	PoE power supply total power limit configuration Power delay start, PoE work and time scheduling Port PoE working status display, Port PoE output priority configuration 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	400W/ (AC100-240V)	600W/ (AC100-240V)
Power Consumption	Standby<18W, Full load<380W	Standby<22W, Full load<600W
Power Supply	Built-in power supply, AC100~240V 50-60Hz, 5.0A	Built-in power supply, AC100~240V 50-60Hz, 6.6A
Physical Parameter		
Operation TEMP/ Humidity	-20~+55°C, 5%~90% RH Non condensing	
Storage TEMP/ Humidity	-40~+75°C, 5%~95% RH Non condensing	
Dimension (L*W*H)	440*290*44.5mm	
Net /Gross Weight	3.8kg/ 4.7kg	4.1kg / 5.1kg
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	<p>Port temperature protection settings</p> <p>IEEE 802.3x flow control (Full duplex)</p> <p>Broadcast storm control based on port speed</p> <p>Port IEEE Green Ethernet energy-saving configuration</p> <p>Limit the speed of the message traffic at the inbound and outbound ports, with mini granularity of 64Kbps</p>
L3 Feature	<p>Static routing/ default routing max 128 entries</p> <p>L2+ network management, ARP protocol, max 1024 entries</p> <p>L3 routing and forwarding, support communication between different network segments and different VLAN</p>
VLAN	<p>Voice VLAN, QinQ configuration, IEEE802.1q</p> <p>VLAN based on MAC, VLAN based on the protocol</p> <p>4K VLAN based on port, Port configuration of Access, Trunk, Hybrid</p>
Port Aggregation	<p>LACP dynamic aggregation, static aggregation</p> <p>Max 13 aggregation groups and 8 ports per group.</p>
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Ring Network Protocol	<p>G.8032 (ERPS), Recovery time less than 20ms</p> <p>255 Ring at most, Max 250 devices per ring.</p>
Multicast	<p>MLD Snooping, Multicast VLAN</p> <p>IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out</p>
Port Mirroring	Bidirectional data mirroring based on port
QoS	<p>Queue Scheduling Algorithm (SP, WRR, SP+WRR)</p> <p>Flow-based rate limiting, Flow-based packet filtering</p> <p>Flow-based redirection, Diff-Serv QoS, Priority Mark/ Remark</p> <p>8*Output queues of each port, 802.1p/DSCP priority mapping</p>

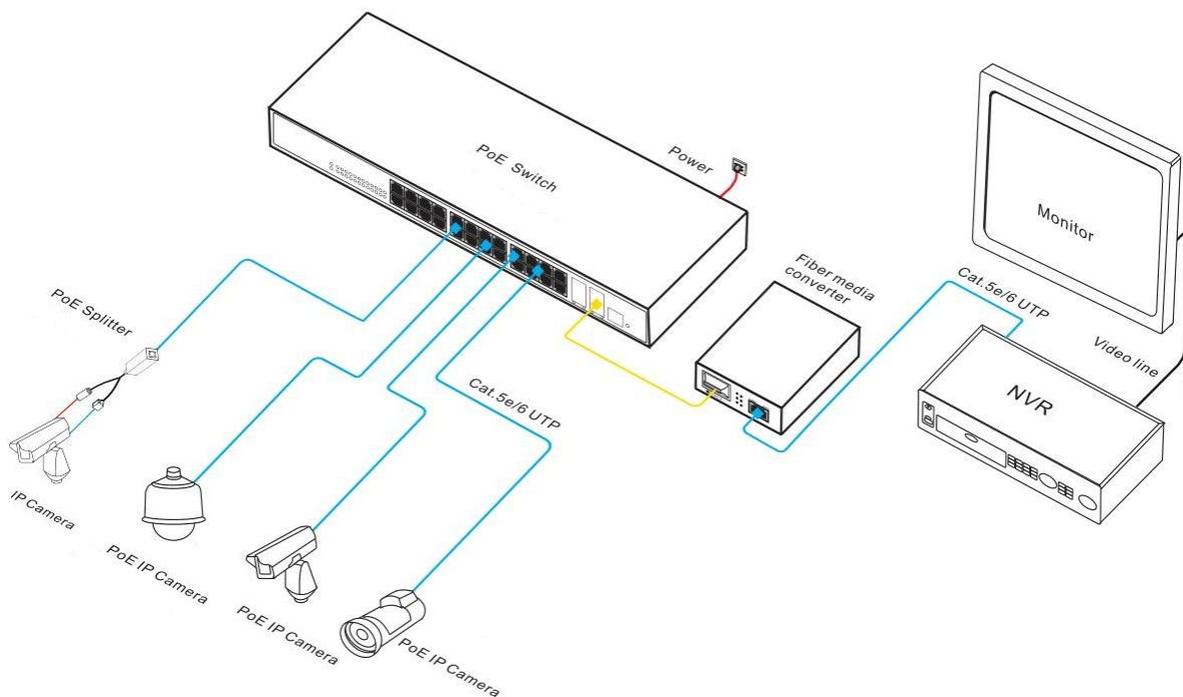
ACL	<p>ACL issued based on port and VLAN</p> <p>L2-L4 packet filtering function can match the first 80 bytes of the message and provide ACL definition based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN, etc.</p>
Security	<p>Port-based IEEE802.1X authentication</p> <p>MAC address the learning number limit</p> <p>SSL ensures data transmission security</p> <p>Port isolation, MAC address the black hole</p> <p>IP+MAC+VLAN+port four-way binding function</p> <p>User hierarchical management and password protection</p> <p>AAA & RADIUS & TACACS+ certification, ARP inspection</p> <p>IP source address protection, Host data backup mechanism</p> <p>SSH 2.0 provides a secure encrypted channel for user login</p> <p>DoS attack prevention, Port broadcast message suppression</p> <p>ARP message rate limit function, ARP intrusion detection function</p>
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	<p>System work log, Link Layer Discovery Protocol</p> <p>NTP clock, Cable length detection, SNMP V1/V2/V3</p> <p>Ping detection, Web network management (HTTPS)</p> <p>ONV-NMS platform cluster management (LLDP+SNMP)</p> <p>One click recovery, View CPU real-time utilization status</p> <p>FTP, TFTP, Xmodem, SFTP file upload and download management</p> <p>Console/ AUX Modem/ Telnet/ SSH2.0 CLI command line configuration</p>
System	<p>Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Cat5 and above Ethernet cable</p> <p>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</p>

DIMENSION



- A. Work indicator
- B. PoE work indicator
- C. 24*10/100/1000M PoE ports
- D. 4*100/1000M SFP fiber (including 2 combo ports)
- E. Console port
- F. Power input port AC100-240V, 50/60Hz

APPLICATION



ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV-POE33026PFM	L2+ managed PoE fiber switch with 24*10/100/1000M RJ45 ports and 4*100/1000M uplink SFP fiber	400W
ONV-POE33026PFM-at	(including 2 combo ports). Port 1-24 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	26-port gigabit managed PoE switch	1	SET
	RJ45-DB9 Line	1	PC
	AC Power Cable	1	PC
	Mounting Kit (Hanging Ear)	1	SET
	User Guide	1	PC
	Warranty Card	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	PC

		and hot plugging.	
	2612-T	SFP optical module, 1.25G single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, supports DDM function and hot plugging.	PC
	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
	2612-T-SC	SFP optical module, 1.25G single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, SC interface, supports 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, supports DDM function and hot plugging.	PC
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

RELATED PRODUCT

Model	Description
ONV-POE33028PFM	L2+ managed PoE fiber switch with 24*10/100/1000M RJ45 ports and 4*100/1000M uplink SFP fiber ports. Port 1-24 can support IEEE 802.3 af/at PoE standard. It built-in 400W power supply and 1U/19" cabinet installation.
ONV-POE36028PFM	L2+ managed PoE fiber switch with 24*10/100/1000M RJ45 ports and 4*1/10G uplink SFP+ fiber ports. Port 1-24 can support IEEE 802.3 af/at PoE standard. It built-in 400W power supply and 1U/19" cabinet installation.
ONV-POE36036PFM	L2+ managed PoE fiber switch with 24*10/100/1000M RJ45 ports and 8*100/1000M SFP fiber ports and 4*1/10G uplink SFP+ fiber ports. Port

	1-24 can support IEEE 802.3 af/at PoE standard. It built-in 400W power supply and 1U/19" cabinet installation.
ONV-POE36048PFM	L2+ managed PoE fiber switch with 48*10/100/1000M RJ45 ports and 4*1/10G uplink SFP+ fiber ports. Port 1-48 can support IEEE 802.3 af/at PoE standard. It built-in 600W power supply and 1U/19" cabinet installation.

CONTACT US



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