

Product Datasheet

28-port Gigabit Easy Managed PoE Switch

(ONV-POE53028PFCM)



OVERVIEW

The ONV-POE53028PFCM is a Gigabit Easy managed PoE switch independently developed by ONV. It has 24*10/100/1000Base-T adaptive RJ45 ports, 4*10/100/1000Base-T uplink RJ45 ports, and 4*1000Base-X uplink SFP fiber ports (The uplink port is a combo port). Ports 1-24 support the 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 supply power to PoE terminal equipment such as wireless AP, IP camera, Internet phone, video door intercom, etc. through a network cable to meet the network environment that requires a high-density PoE power supply. It is suitable for hotels, campuses, factory dormitories, small and medium-sized enterprises, and cost-effective networking.

The ONV-POE53028PFCM supports web management, ONV-NMS cloud management

platform, and cloud management APP management, enabling functions such as security network storm control, port management, VLAN configuration, and remote operation and maintenance. It features fast switching capabilities and multiple access ports, making it suitable for LAN devices of various sizes.

FEATURE

■ Gigabit access, uplink RJ45/SFP combo port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- ◇ Support Gigabit RJ45 port and uplink RJ45/SFP combo port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ Smart PoE power supply

- ◇ Remote PoE management function, port remote opening and closing.
- ◇ Comply with IEEE 802.3 af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.
- ◇ 24*10/100/1000Base-T RJ45 ports can support PoE power to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

■ Minimalist application

- ◇ Remote upgrades, remote reboots, and factory resets.
- ◇ Real-time fault alarms, fault location, and automatic work order dispatch.
- ◇ Web-based network management functions: QoS, link aggregation, ring network management, port mirroring, port control, and bandwidth management, etc.
- ◇ Cloud platform + mobile APP operation and maintenance management, providing visualized PoE power supply control, network topology management, and VLAN segmentation.
- ◇ Abandoning complex network management configurations while retaining practical network management functions, enabling rapid network deployment and centralized operation and maintenance through the operation and maintenance platform.

■ Innovative features

- ◇ **Long Distance Mode (E):** Switch E to the ON position (default OFF), and port 16-24 support 10M/250 meters transmission.
- ◇ **Easy Management Function (W):** Switch to the ON position (default ON) to enable the management function and access the management interface to configure the switch as needed. Once this function is enabled, all other DIP switch functions are disabled and must be configured separately through management.
- ◇ **AI Self-Healing Mode + VLAN (V):** When the switch is turned to the "ON" position (default "OFF"), the watchdog function is enabled on ports 1-24. When port communication fails, the corresponding port's PoE will automatically restart. At the same time, the physical VLAN isolation function is enabled on ports 1-24 to suppress broadcast storms.
- ◇ **Storm suppression (B):** switch B to ON position (default OFF), The storm suppression function will start port monitoring and implement traffic suppression and storm control, thereby limiting the traffic to a reasonable range and solving the problem of a large number of broadcast, multicast, multicast, and unicast (including unknown unicast) in the network.) data frames cause problems such as network slowdown, data transmission timeout, data transmission congestion, and massive packet loss.

■ Stable and reliable

- ◇ CE, FCC, RoHS.
- ◇ The user-friendly pane can show the device status through the LED indicators of PWR SYS, Link, L/A, and PoE.
- ◇ Low power consumption, with fan, galvanized steel casing, and excellent heat dissipation ensures the stable operation of the switch.

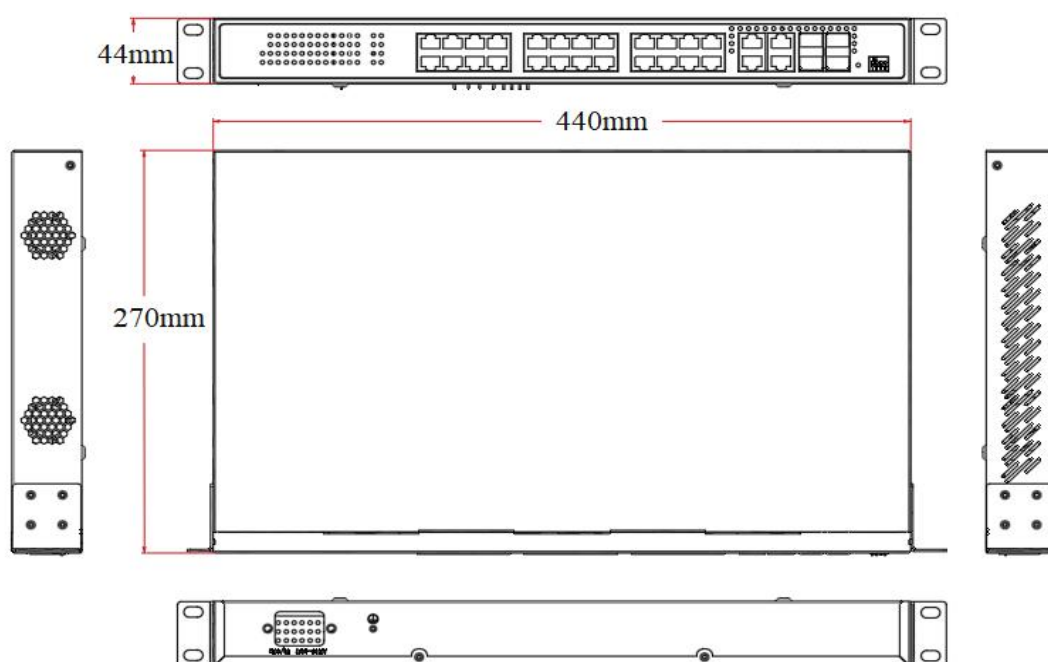
TECHNICAL SPECIFICATION

Model	ONV-POE53028PFCM	ONV-POE53028PFCM-at
Interface Characteristics		
Fixed Port	24*10/100/1000Base-T PoE ports (Data/ Power)	
	4*10/100/1000Base-T uplink RJ45 ports (Data)	
	4*1000Base-X uplink SFP fiber ports (Cmobo port)	
Ethernet Port	Ports 1-24 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 included 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 (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	56Gbps (Non-blocking)	
Forwarding Rate @64byte	41.66Mpps	
MAC	8K	
Buffer Memory	4M	
Jumbo Frame	10K	
LED Indicator	Power: PWR (Green), System: SYS (Green), Network: Link (Green), PoE: PoE (Red), Fiber port: L/A (Green)	

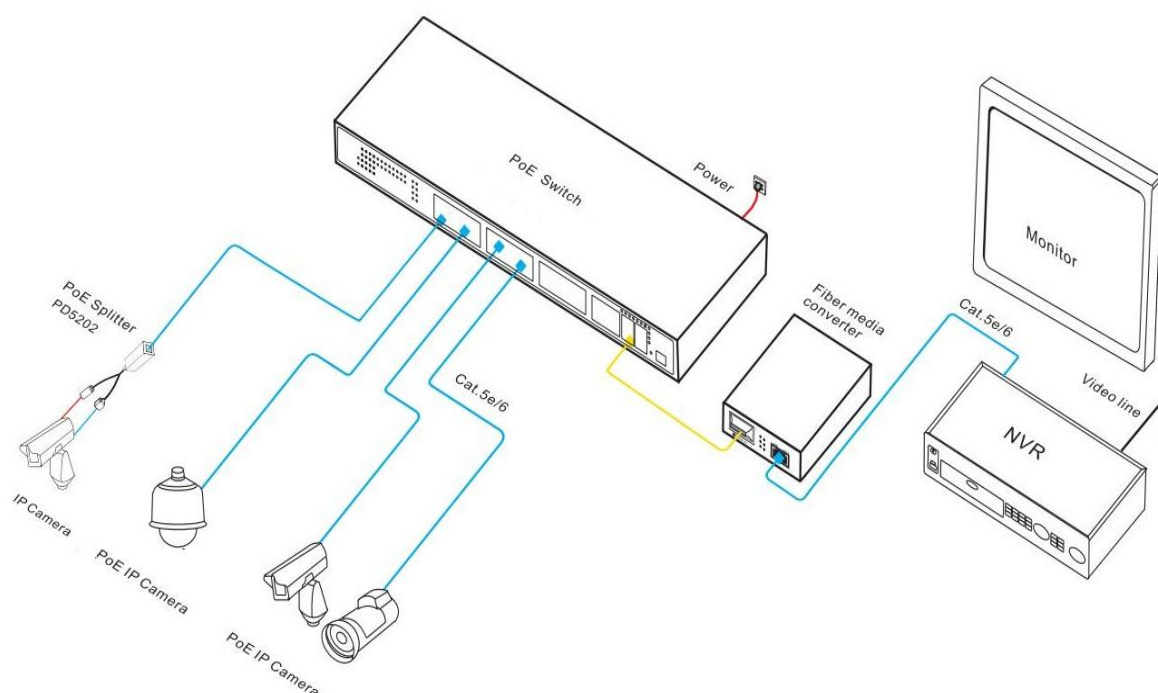
Reset Switch	Press and hold Reset for 10 seconds, then release to restore factory default settings.	
PoE& Power Supply		
PoE Port	Port 1-24	
PoE Management	Remote on/off of PoE ports, port power, and real-time status viewing	
Power Supply Pin	1/2(+) 3/6 (-)	
Max Power Per Port	30W, IEEE802.3af/at	
Total PWR/ Input Voltage	400W/ (AC100-240V)	600W/ (AC100-240V)
Power Consumption	Standby<16W, full load<400W	Standby<16W, 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℃, 5%~90% RH non-condensing	
Storage Temp/ Humidity	-40℃~+75℃, 5%~95% RH non-condensing	
Dimension (L*W*H)	440*270*44mm	
Net /Gross Weight	3.15kg/ 4.0kg	3.5kg/ 4.3kg
Installation	Desktop, Wall mount, 1U/19” cabinet	
Certification& Warranty		
Lightning Protection	Lightning protection: 6KV 8/20us, Protection level: IP30	
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15, RoHS	
Warranty	3 years, 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, Prevent ring network failure function (STP/ RSTP)	

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, SNMP V1/V2C, Web Network Management ONV-NMS platform management (Local platform/ Cloud platform) Mobile APP operation and maintenance management, One-key recovery
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-POE53028PFCM	Easy managed PoE switch with 24*10/100/1000M RJ45 ports, 4*10/100/1000M uplink RJ45 ports, and 4*1000M uplink SFP fiber ports (the uplink port is a combo port). Ports 1-24 support the IEEE 802.3 af/at PoE standard. It has a built-in power supply and supports desktop and 1U/19" cabinet installation.	400W
ONV-POE53028PFCM-at		600W

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

PACKING LIST

Packing List	Content	Qty	Unit
	28-port Gigabit Easy managed PoE switch	1	Set
	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. 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
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CONTACT US



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