

## Product Datasheet

# 20-port Gigabit Easy Managed PoE Switch

(ONV-POE53020PFCM)



## OVERVIEW

The ONV-POE53020PFCM is a Gigabit Easy managed PoE switch independently developed by ONV. It has 16\*10/100/1000Base-T adaptive RJ45 ports and 4\*10/100/1000Base-T uplink RJ45 and 4\*1000Base-X uplink SFP fiber combo ports. Port 1-16 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 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-POE53020PFCM can support Web management and ONV-NMS management platform and cloud management APP management to realize security network storm control, port management, VLAN configuration, remote operation and maintenance, and other functions. It has high reliability, is easy to install and maintain, has fast switching functions, and multiple access ports, and is suitable for accessing 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 Gigabit 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.
- ◇ 16\*10/100/1000Base-T RJ45 ports can support PoE power to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

### ■ Extreme Optimization, minimalist application

- ◇ Real-time fault alarm and fault location.
- ◇ Remote upgrade, remote restart, and factory reset.
- ◇ Local platform, cloud platform, and mobile APP operation and maintenance management.
- ◇ Visual network topology management, VLAN division, PoE control, port control, and switching capacity management.
- ◇ Practical network management functions are retained according to industry application requirements, and network deployment and centralized operation and maintenance can be quickly realized through the operation and maintenance platform.

### ■ Innovative features

- ◇ Switch **E** to the ON position, and port 9-16 support 10M/250 meters transmission.
- ◇ Switch **W** to the ON position, turn on the network management function, enter the network management interface, and configure the required functions of the switch. After this function is turned on, all other dialing functions will be invalid and must be

configured separately through management.

- ◇ Switch **V** to the ON position. Port 1-16 supports the watchdog function and automatically detects data communication status in real time. When port communication fails, the corresponding port PoE will automatically restart. Port 1-16 supports physical VLAN isolation functions to suppress broadcast storms. , improve network performance.
- ◇ Switch **B** to the ON position, and 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

- ◇ CCC, CE, FCC, RoHS.
- ◇ The user-friendly pane can show the device status through the LED indicator 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.

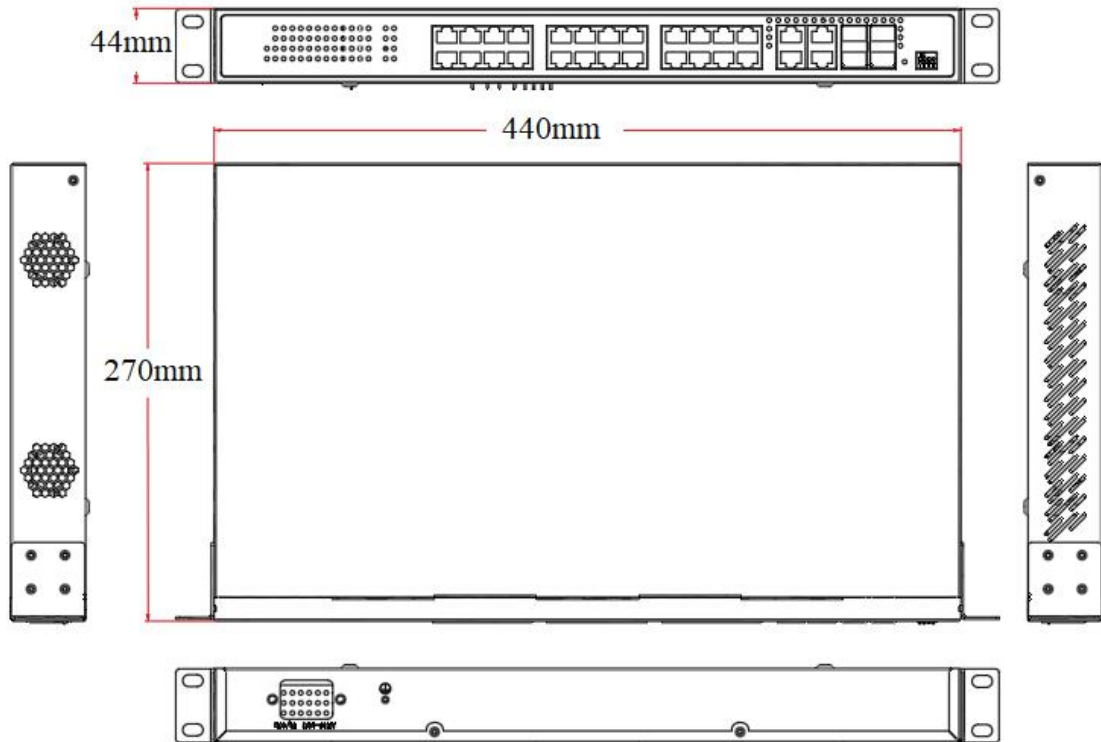
## TECHNICAL SPECIFICATION

Model	ONV-POE53020PFCM	ONV-POE53020PFCM-at
<b>Interface Characteristics</b>		
Fixed Port	16*10/100/1000Base-T PoE ports (Data/ Power) 4*10/100/1000Base-T uplink RJ45 ports (Data) 4*1000Base-X uplink SFP fiber cmobo ports (Data)	
Ethernet Port	Port 1-16 can support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/ MDI-X self-adaption	
Twisted Pair	10BASE-T: Cat3,4,5 UTP (≤100 meters)	

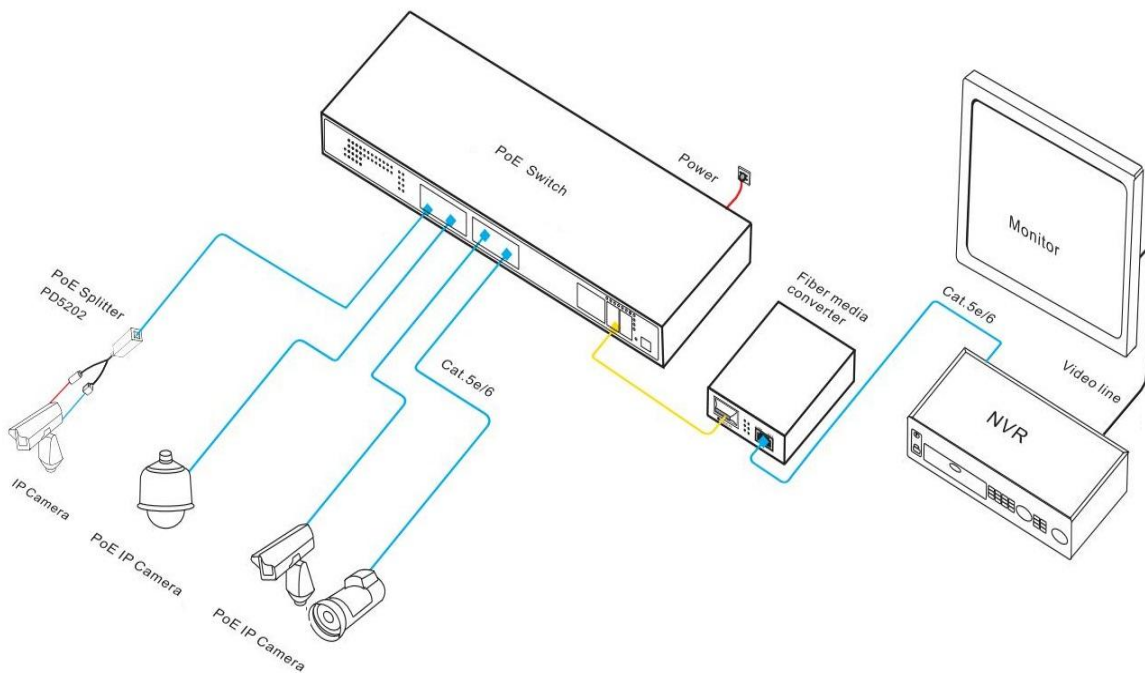
Transmission	100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)	
Optical Fiber Port	Gigabit optical fiber interface, default no included optical module (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)	
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.	
<b>Chip Parameter</b>		
Network Management Type	L2 (Web management, platform management)	
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	56Gbps (Non-blocking)	
Forwarding Rate @64byte	29.76Mpps	
MAC	8K	
Buffer Memory	4M	
Jumbo Frame	9.2K	
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 and then release to restore factory default settings.	
<b>PoE &amp; Power Supply</b>		
PoE Port	Port 1-16	
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, IEEE 802.3 af/at	
Total PWR/ Input Voltage	250W/ (AC100-240V)	400W/ (AC100-240V)
Power Consumption	Standby<16W, Full Load<250W	Standby<18W, Full Load<400W

Power Supply	Built-in power supply, AC100~240V 50-60Hz, 4.8A	Built-in power supply, AC100~240V 50-60Hz, 5.0A
<b>Physical Parameter</b>		
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*270*44mm	
Net /Gross Weight	2.8kg /3.6kg	3.1kg /3.9kg
Installation	Desktop, Wall mount, 1U/19" cabinet	
<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	3 years, lifelong maintenance.	
<b>Network Management Feature</b>		
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)	
Security	Broadcast storm suppression	
Management	One-key recovery, Web Management Mobile APP operation and maintenance management ONV-NMS platform management (Local platform/ Cloud platform)	
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-POE53020PFCM	Easy managed PoE switch with 16*10/100/1000M RJ45 ports and 4*10/100/1000M uplink RJ45 ports and 4*1000M SFP fiber combo ports. Port 1-16 can	250W
ONV-POE53020PFCM-at	support IEEE 802.3 af/at PoE standard. It built-in power supply and desktop and 1U/19" cabinet installation.	400W

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

## PACKING LIST

	Content	Qty	Unit
Packing List	20-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 Optica 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/	PC

		RX1550nm, transmission distance: 20km, LC interface. support DDM function and hot plugging.	
	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



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