

## Product Datasheet

# 18-port 2.5G Uplink PoE Switch

(ONV-POE37016PF)



## OVERVIEW

The ONV-POE37016PF is a 2.5G uplink PoE switch independently developed by ONV, designed specifically for medium-to-high density PoE power supply and high-speed fiber optic uplink requirements. It provides 16\*10/100/1000Base-T adaptive RJ45 ports and 2\*1/2.5G uplink SFP fiber ports, ensuring high-performance networking for terminal devices while supporting smooth upgrades to 2.5G fiber optic uplink, thus improving the transmission bandwidth of the network aggregation layer.

Ports 1-16 can support the IEEE 802.3af/at PoE standard, and the single-port max PoE power is 30W. It can automatically detect and safely and stably power various standard PoE terminal devices. Data communication and power delivery can be completed simultaneously through a single network cable, allowing flexible connection to wireless access points, high-definition network cameras, IP phones, smart building intercom terminals, IoT devices, etc., significantly simplifying cabling and reducing deployment and maintenance costs.

SFP fiber ports support adaptive 1G and 2.5G speeds, providing users with an economical and flexible fiber optic uplink option, especially suitable for scenarios requiring increased uplink bandwidth, such as surveillance aggregation and wireless network backhaul. Plug and play, no configuration required; simply power on and it's ready to use,

significantly lowering the technical barrier to network deployment and maintenance.

The ONV-POE37016PF is suitable for hotel room and public area coverage, campus multimedia teaching and monitoring networks, smart park IoT access, scenic area security and wireless systems, supermarket digital operation networks, factory dormitories, and integrated networking for small and medium-sized enterprises. It is an ideal choice for building high-density PoE power supply and cost-effective fiber optic uplink networks.

## FEATURE

### ■ Gigabit access, uplink 1/2.5G SFP fiber 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 1/2.5G SFP fiber port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

### ■ Smart PoE power supply

- ◇ 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 support PoE power, meeting the needs of security monitoring, teleconferencing systems, wireless coverage, and other scenarios.

### ■ Stable and reliable

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

## TECHNICAL SPECIFICATION

Model	ONV-POE37016PF
<b>Interface Characteristics</b>	
Fixed Port	2*1000/2500Base-X uplink SFP fiber ports (Data) 16*10/100/1000Base-T PoE ports (Data/ Power)
Ethernet Port	Port 1-16 can support 10/100/1000Base-T 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	2.5G 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/ 0-0.55km, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km
<b>Chip Parameter</b>	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, 2500BASE-X, IEEE802.3z 1000Base-X, IEEE8 02.3x
Forwarding Mode	Store and forward (Full wire speed)
Switching Capacity	68Gbps (non-blocking)
Forwarding Rate@64byte	31.25Mpps
MAC	16K
Buffer Memory	8.4M
Jumbo Frame	12K
LED Indicator	Network: Link/ Act (Green), Fiber port: L/A (Green), Power: PWR (Green), PoE: PoE (Green)
<b>PoE&amp; Power Supply</b>	
PoE Port	Port 1-16
Power Supply Pin	1/2(+) 3/6 (-)

Max Power Per Port	30W
Total PWR/ Input Voltage	250W/ (AC100-240V)
Power Consumption	Standby<5W, full load<230W
Power Supply	Built-in power supply, AC100-240V 50-60Hz, 4.1A
<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)	330*204*44mm
Net /Gross Weight	1.9kg/ 2.4kg
Installation	Desktop, wall-mounted, 1U/19" cabinet
<b>Certification&amp; Warranty</b>	
Lightning Protection	Protection level: IP30, Lightning protection: 6KV 8/20us
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15, RoHS
Warranty	3 years, lifelong maintenance

## DIMENSION

## APPLICATION

## ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV-POE37016PF	PoE switch with 16*10/100/1000M RJ45 ports and 2*1/2.5G uplink SFP fiber ports. Ports 1-16 can support the IEEE 802.3af/at PoE standard. It is built-in power supply and supports 1U/19" cabinet installation.	250W

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

## PACKING LIST

Packing List	Content	Qty	Unit
	18-port 2.5G uplink PoE switch	1	PC
	AC Power Cable	1	PC
	Mounting Kit	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: 500m, 2*LC interface. Supports DDM function and hot plugging.	PC
	2632	SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, 2*LC interface. Supports DDM function and hot plugging.	PC
	2612-T	SFP optical module, 1.25G single-mode single fiber TX1310nm, transmission distance: 20km, 1*LC interface. Supports DDM function and hot plugging.	PC
	2613-R	SFP optical module, 1.25G single-mode single fiber TX1550nm, transmission distance: 20km, 1*LC interface. Supports DDM function and hot plugging.	PC
Power Module	2633	1.25G SFP optical module to 10/100/1000M RJ45 port (SFP to RJ45), transmission distance: 100m	PC
	2733	2.5G SFP optical module to 10/100/1000M RJ45 port (SFP to RJ45), transmission distance: 100m	PC

## CONTACT US



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