

Product Datasheet

18-port 10G Uplink PoE Switch

(ONV-POE56016PF)



OVERVIEW

The ONV-POE56016PF is a 10G uplink PoE fiber switch independently developed by ONV, specifically designed for high-density, high-performance PoE power supply and high-speed fiber optic uplink scenarios. It provides 16*10/100/1000Base-T adaptive RJ45 ports and 2*1/2.5/10GBase-X SFP+ fiber ports. Supporting flexible multi-rate fiber optic uplinks and comprehensive PoE power supply capabilities, enabling stable power supply and data transmission for multiple terminal devices simultaneously.

Ports 1-16 can support the IEEE 802.3af/at PoE standard, and the single-port max PoE power is 30W. It can automatically identify and safely power compliant devices. Power and data transmission can be simultaneously supplied to various PoE terminal devices such as wireless access points, network cameras, IP phones, video intercom systems, and IoT terminals via an Ethernet cable, significantly simplifying cabling and reducing deployment and maintenance costs.

The uplink optical port supports 1G, 2.5G, and 10G multi-rate adaptive switching, compatible with optical modules of different rates, facilitating access to gigabit or 10G backbone networks and enabling smooth upgrades and flexible networking. It is suitable for scenarios with high requirements for PoE power density and uplink bandwidth, such as wireless coverage in hotel rooms, multimedia classrooms on campuses, smart park monitoring, wireless networks in scenic areas, security systems in supermarkets and

shopping malls, factory dormitory networking, and integrated network construction for small and medium-sized enterprises. Plug and play, requiring no complex configuration, it is ready to use immediately upon power-up, greatly reducing the technical threshold for network deployment and maintenance. Adopting a robust metal casing and optimized heat dissipation design, it ensures stability during long-term high-load operation, making it an ideal choice for building an economical, efficient, safe, and reliable one-stop PoE power supply and fiber optic uplink network.

FEATURE

■ Gigabit access, uplink 1/2.5/10G 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 1/2.5/10G 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.
- ◇ 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 indicators of PWR, Link, and PoE.
- ◇ Low power consumption, with fan, Galvanized steel housing, and excellent heat dissipation to ensure stable operation of the switch.

TECHNICAL SPECIFICATION

Model	ONV-POE56016PF
Interface Characteristics	
Fixed Port	2*1/2.5/10G 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	1/10G optical fiber interface; default does not 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
Chip Parameter	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, 2500BASE-X (2.5G), IEEE802.3ae 10GBASE-X, IEEE802.3x
Forwarding Mode	Store and forward (Full wire speed)
Switching Capacity	88Gbps (non-blocking)
Forwarding Rate@64byte	53.57Mpps
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)
PoE& Power Supply	
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
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)	330*204*44mm
Net /Gross Weight	1.9kg/ 2.4kg
Installation	Desktop, wall-mounted, 1U/19" cabinet
Certification& Warranty	
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-POE56016PF	PoE switch with 16*10/100/1000M RJ45 ports and 2*1/2.5/10G 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 10G uplink PoE switch	1	PC
	AC Power Cable	1	PC
	Mounting Kit	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: 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
	7733	10G SFP+ optical module to RJ45 port, RJ45: 1/10G auto-sensing, transmission distance: 30m (Cat6A/7)	PC
10G	6630	SFP+ optical module, 10G multi-mode dual fiber 850nm,	PC

Optical Module		transmission distance: 300m, 2*LC interface. Supports DDM function and hot plugging.	
	7832	SFP+ optical module, 10G single-mode dual fiber 1310nm, transmission distance: 20km, 2*LC interface. Supports DDM function and hot plugging.	PC
	7832-27	SFP+ optical module, 10G single-mode single fiber TX1270nm, transmission distance: 20km, 1*LC interface. Supports DDM function and hot plugging.	PC
	7832-33	SFP+ optical module, 10G single-mode single fiber TX1330nm, transmission distance: 20km, 1*LC interface. Supports DDM function and hot plugging.	PC

CONTACT US



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