

Product Datasheet

18-Port Gigabit Uplink AI PoE Switch

(ONV-H1016PLD)



OVERVIEW

ONV-H1016PLD is an unmanaged AI PoE switch independently developed by ONV. It has 16*10/100M PoE ports and 2*10/100/1000M uplink RJ45 ports and 1*1000Base-X SFP fiber port (combo port). Port 1-16 can support IEEE802.3af/at standard PoE power supply, and single port PoE power reaches 30W. The maximum PoE output power is 250W. Port 1-16 can support the PoE watchdog function. When the port communication failure corresponds to the port POE will automatically restart, self-recover network communication, reducing manual intervention and maintenance. 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, video access control, etc. through the network cable, to meet the network environment that needs high-density PoE power supply. It is suitable for hotels, campuses, parks, banks, hospitals, factories, small and medium-sized enterprises form a cost-effective network.

Unmanaged model, plug and play, no configuration, easy to use.

FEATURE

■ 10/100Mbps access, gigabit TP/SFP uplink

- ◇ 16*10/100M PoE ports and 2*10/100/1000M RJ45 ports and 1*1000M combo port, which is convenient for users to flexibly network to meet various networking needs.
- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.

■ Smart PoE power supply function

- ◇ 16*10/100Base-TX RJ45 ports support POE, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- ◇ IEEE 802.3af/at PoE standard, without damaging 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.
- ◇ 16*10/100Base-TX PoE ports can support the watchdog function to automatically detect the data communication status in real-time. When the port communication fails, the corresponding port POE will automatically restart to repair the network communication, eliminating the need for manual maintenance.

■ Innovative function

- ◇ **long-distance transmission and VLAN mode (E):** When the switch status is "ON" (default OFF), Port 1-16 physical VLAN isolation is enabled, suppressing broadcast storms and improving network performance, and port 9-16 rate is reduced to 10M. The use of the existing twisted pair can break through the transmission limit of 100m of twisted pairs, and the transmission distance can reach 250m. On the other hand, it can solve the problem of poor transmission caused by line aging.
- ◇ **AI self-healing mode (D):** When the switch status is "ON" (default OFF), port 1-16 can support the watchdog function and automatically detects the data communication status in real-time.
- ◇ **Real-time power and power priority mode (P):** When the switch status is "ON" (default

OFF), the POE real-time power grading indicator lights up, quickly understanding the power consumption of the host, and enabling the port priority function to ensure the port 1 power output.



■ Stable and reliable

- ◇ CCC,CE, FCC, RoHS.
- ◇ Support desktop and 1U/19 inch cabinet installation.
- ◇ Plug and play, no configuration, simple and convenient.
- ◇ Low power consumption, galvanized steel casing, The fan active cooling.
- ◇ Self-developed power supply, high redundancy design, providing a long term and stable PoE power output.
- ◇ The user-friendly panel, it can show the device status through the LED indicator of PWR, link, L/A, and PoE.

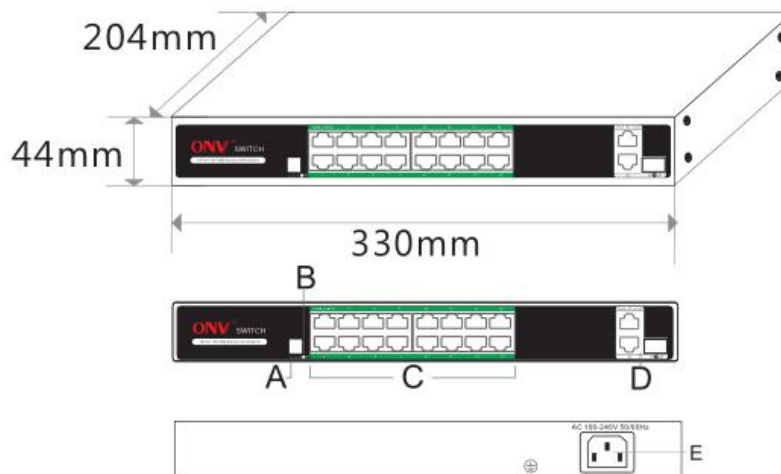
TECHNICAL SPECIFICATION

Model	ONV-H1016PLD	ONV-H1024PLD
Interface Characteristics		
Fixed Port	16*10/100Base-TX PoE ports (Data/Power) 2*10/100/1000Base-T uplink RJ45 ports (Data) 1*1000Base-X SFP fiber port (Data) (combo port)	24*10/100Base-TX PoE ports (Data/Power) 2*10/100/1000Base-T uplink RJ45 ports (Data) 1*1000Base-X SFP fiber port (Data) (combo port)
Ethernet Port	Port 1-16 support 10/100Base-TX, port 17-18 support 10/100/1000Base-T(X) automatic detection, full/half Duplex MDI/MDI-X adaptive	Port 1-24 support 10/100Base-TX, port 25-26 support 10/100/1000Base-T(X) automatic detection, full/half Duplex MDI/MDI-X adaptive
Twisted Pair Transmission	10BASE-T:Cat5 UTP(≤250 meter) 100BASE-TX:Cat5 or later UTP(≤100 meter) 100BASE-T:Cat5e or later UTP(≤100 meter)	
SFP Slot Port	Gigabit SFP optical fiber interface, default not matching optical modules (optional order 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.	
Functional Switch	(E, D, P) Three levels, the default state is "OFF", the function description is as follows after "ON" is turned on E is the "ON" state, port 9-16/17-24 can support long-distance transmission 10M/250m and VLAN transmission mode; when "OFF", 100 meters transmission. D is the "ON" state, port 1-16/1-24 can support AI self-healing mode;	

	when "OFF", no communication self-healing function.	
	P is the "ON" state, POE outputs total power and priority indication mode; when "OFF", no power indication function.	
Chip Parameter		
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	14.8Gbps(non-blocking)	
Forwarding Rate@64byte	5.36Mpps	6.55Mpps
MAC	16K	
Buffer Memory	4M	
Jumbo Frame	10K	
LED Indicator	Power: PWR (green), Network : link (yellow), PoE :PoE (green) .rate:1000M (green)	
PoE & Power		
PoE Port	Port 1 to 16 IEEE802.3af/at @ POE	Port 1 to 24 IEEE802.3af/at @ POE
Power Supply Pin	Default 1/2 (+), 3/6 (-), Optional 4/5(+), 7/8(-)	
Max Power Per Port	30W, IEEE802.3af/at	
Total PWR / Input Voltage	250W (100-240V)	
Power Consumption	Standby<15W,Full load<240W	Standby<20W,Full load<250W
Power Supply	Built-in switching power supply, AC 100 ~ 240V 50-60Hz 4.1A	
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)	330*204*44mm	
Net /Gross Weight	<1.7kg / <2.2kg	<2.3kg / <3kg
Installation	Desktop, wall mounted, 19 inch 1U cabinet	
Certification & Warranty		
Lightning protection / protection level	Lightning protection: 4KV 8/20us, Protection level: IP30	
Certification	CCC, CE mark, commercial, CE/LVD EN60950, FCC Part 15 Class B, RoHS	
Warranty	1 year, lifelong maintenance.	

DIMENSION



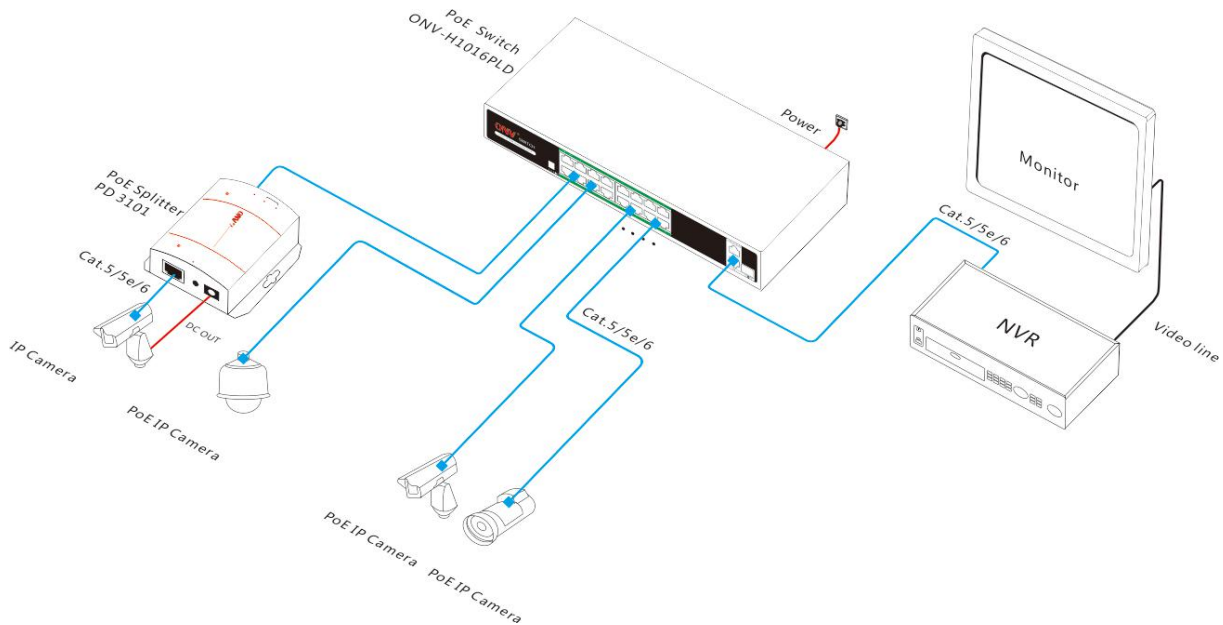
A. Multi-functional switch B. Working LED indicator

C. 16*PoE port

D. 2*10/100/1000M RJ45 ports and 1*1000M SFP combo port

E. Power input port AC100-240V, 50/60Hz

APPLICATION



ORDERING INFORMATION

Model	Description
ONV-H1016PLD	Unmanaged AI PoE switch with 16*10/100M PoE ports and 2*10/100/1000M uplink RJ45 ports and 1*1000M SFP combo port, Port 1-16 can support IEEE802.3af/at PoE standard. Adjust function switch, Port 9-16 can support 10M/250 meters transmission. VLAN isolation, AI self-healing, power indication, and power supply priority. Support 1U/19 inch cabinet installation.
ONV-H1024PLD	Unmanaged AI PoE switch with 24*10/100M PoE ports and 2*10/100/1000M uplink RJ45 ports and 1*1000M SFP combo port, Port 1-24 can support IEEE802.3af/at PoE standard. Adjust function switch, Port 17-24 can support 10M/250 meters transmission. VLAN isolation, AI self-healing, power indication, and power supply priority. Support 1U/19 inch cabinet installation.

PACKING LIST

PACKING LIST	CONTENT	QTY	UNIT
	18-port Gigabit uplink AI PoE switch	1	SET
	AC Power Cable	1	PC
	Mounting Kits(Hanging Ear)	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

CONTACT US



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