

## Product Datasheet

# 27-port Gigabit Uplink PoE Switch

(ONV-H1024PFD-2BT)



## OVERVIEW

The ONV-H1024PFD-2BT is a smart PoE fiber switch independently developed by ONV. It has 24\*10/100Base-TX RJ45 ports and 2\*10/100/1000Base-T RJ45 ports and 1\*1000Base-X uplink SFP fiber port. Port 1-2 supports PoE++ power supply, with a single-port PoE power of up to 60W and backward compatibility. Port 3-24 supports PoE+ power supply, with a single-port PoE power of up to 30W. Port 9-16 support PoE watchdog function; if a port experiences a communication failure, the corresponding port's PoE will automatically restart, restoring network communication without affecting the normal operation of other ports, effectively reducing manual intervention and maintenance costs. It can power PoE terminal devices such as wireless APs, network cameras, VoIP phones, and video intercoms via Ethernet cables, meeting the needs of network environments requiring high-density/high-power PoE power supply. It is suitable for small and medium-sized enterprises such as hotels, campuses, industrial parks, government and enterprise units, banks, hospitals, communities, and factories to build cost-effective networks. Plug and play, no configuration, easy to use.

## FEATURE

### ■ 10/100M access, uplink Gigabit RJ45/SFP port

- ◇ Support non-blocking wire-speed forwarding.
- ◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- ◇ Provide RJ45 ports and uplink Gigabit SFP/RJ45 port for flexible networking and meets the networking requirements of various scenarios.

### ■ Smart PoE power supply

- ◇ 24\*10/100Base-TX RJ45 ports support PoE power to meet the needs of PoE power in various scenarios in the security field.
- ◇ Compliant with PoE standards, backward compatible, automatically identifies PoE devices, and supplies power without damaging non-PoE devices. Port 1-2 have a max PoE output power of 60W per port. Port 3-16 have a max PoE output power of 30W per port.

### ■ Innovative function

- ◇ **Long-distance mode (E):** When switched to the ON position (default off), the port 17-24 rate is 10M, and the transmission distance is up to 250 meters.
- ◇ **PoE watchdog:** The watchdog function is enabled by default for port 17-24, which can automatically detect the data communication status in real-time. When the port communication fails, the corresponding port PoE will automatically restart.

### ■ Stable and reliable

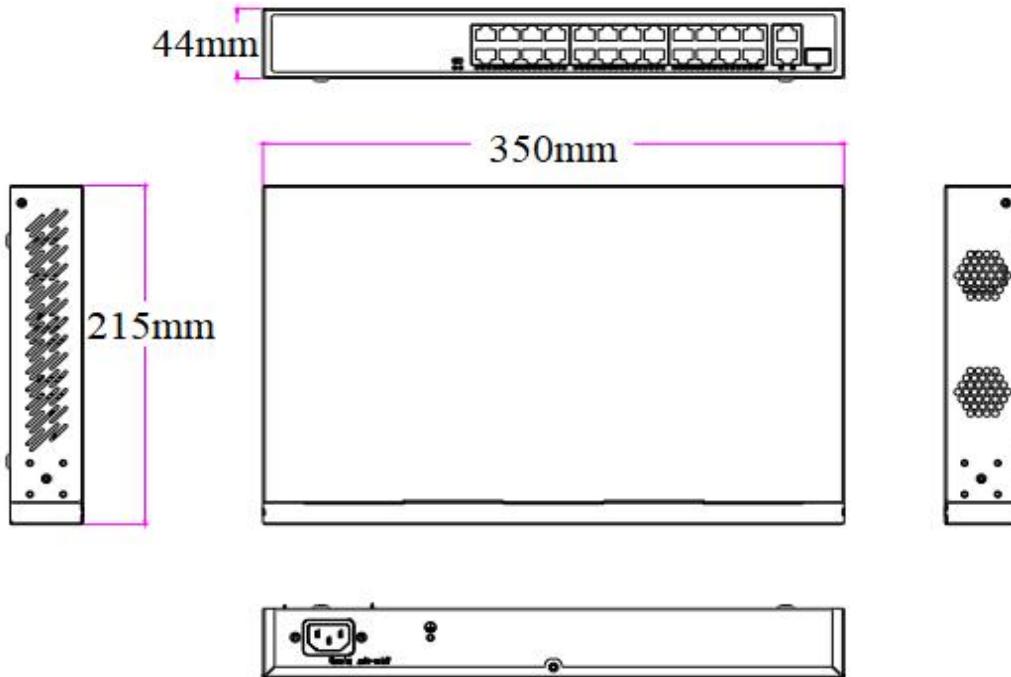
- ◇ CE, FCC, RoHS.
- ◇ Plug and play, no configuration, simple and convenient.
- ◇ The user-friendly panel can show the device status through the LED indicators of PWR, Link, and PoE.
- ◇ Low power consumption, with fan, galvanized steel housing, and excellent heat dissipation to ensure the stable operation of the switch.

## TECHNICAL SPECIFICATION

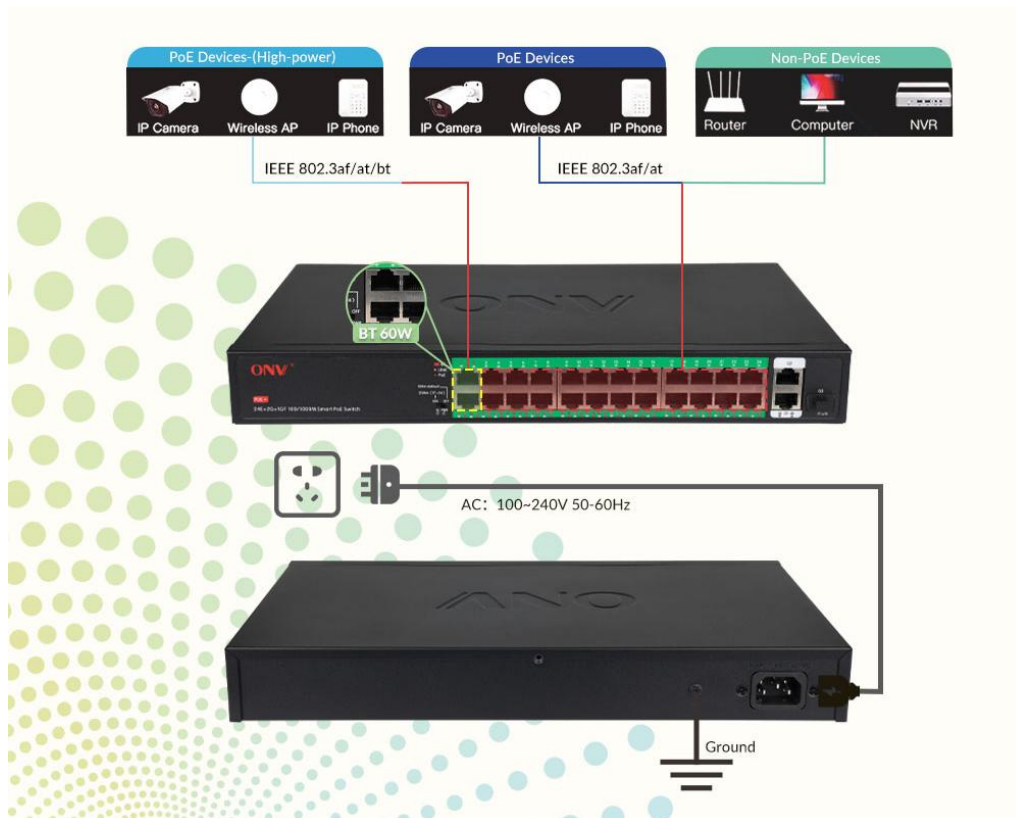
Model	ONV-H1024PFD-2BT
<b>Interface Characteristics</b>	
Fixed Port	22*10/100Base-TX PoE ports (Data /Power) 2*10/100Base-TX bt PoE ports (Data/ Power) 1*1000Base-X uplink SFP fiber port (Data) 2*10/100/1000Base-T uplink RJ45 ports (Data)
Ethernet Port	Port 1-24 can support 10/100Base-T(X) and port 25-26 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 (≤250 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 does not include 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.
Functional Switch	<b>E file:</b> long distance transmission function: default-OFF, enable-ON. When turned on, the rate of ports 17-24 support 10M/250 meters transmission
<b>Chip Parameter</b>	
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	12Gbps (non-blocking)
Forwarding Rate@64byte	8.04Mpps
MAC	2K
Buffer Memory	2M
Jumbo Frame	9.2K

LED Indicator	Power: PWR (Green), Network: Link (Green), PoE: PoE (Red), Function switch: Extend (Green)
<b>PoE&amp; Power Supply</b>	
PoE Port	Port 1-2 support PoE++ power, Port 3-24 support PoE+ power
Power Supply Pin	Port 1-2 default 1/2,4/5(+), 3/6,7/8(-), Port 3-24 default 1/2(+) 3/6(-)
Max Power Per Port	60W, PoE++
Total PWR/ Input Voltage	250W/ (AC100-240V)
Power Consumption	Standby<15W, full load<250W
Power Supply	Built-in power supply, AC100~240V 50-60Hz, 4.1A
<b>Physical Parameter</b>	
Operation Temp/ Humidity	-20~+55°C, 5%~90% RH non-condensing
Storage Temp/ Humidity	-40~+80°C, 5%~95% RH non-condensing
Dimension (L*W*H)	350*215*44mm
Net /Gross Weight	1.9kg/ 2.45kg
Installation	Desktop, Rack mounted
<b>Certification&amp; Warranty</b>	
Lightning Protection	4KV 8/20us, Protection level: IP30
Certification	CE mark, commercial, CE/LVD EN62368-1, FCC Part 15, RoHS
Warranty	1 year, lifelong maintenance.

## DIMENSION



## APPLICATION



## ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV-H1024PFD-2BT	PoE switch with 24*10/100M RJ45 ports and 2*10/100/1000M RJ45 ports and 1*1000M uplink SFP fiber port. Port 17-24 default support PoE watchdog (auto-restart PoE). Adjustment function switch, Port 17-24 support 10M/250 meter transmission. Built-in power supply.	52V/250W

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

## PACKING LIST

	Content	Qty	Unit
Packing List	27-port Gigabit uplink PoE switch	1	Set
	AC Power Line	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: 0.55km, 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,	PC

		transmission distance: 20km, LC interface. supports DDM function and hot plugging.	
	2613-R	SFP optical module, 1.25G single-mode single fiber TX1550nm, transmission distance: 20km, LC interface. supports DDM function and hot plugging.	PC
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

## CONTACT US

**ONV** Optical Network Video Technologies (Shenzhen) Co., Ltd.

Tel: 0086-755-33376606

Fax: 0086-755-33376608

WeChat: ONV-PoE-IoT

Email: onv@onv.com.cn

Skype: onv@onv.com.cn

Teams: onv@onv.com.cn

Website: www.onvcom.com

Headquarter Address: Room 1003, Block D, Terra Building, Futian District, Shenzhen

Factory Address: Building B3, Galaxy Artificial Intelligence Industrial Park, No. 333, Zhongkai 6th Road, Chenjiang Street, Zhongkai High-tech Zone, Huizhou

