Product Datasheet

6-port Gigabit Uplink Managed PoE Switch
(ONV-POE31064PFM)

OVERVIEW

The ONV-POE31064PFM is a Gigabit uplink L2 managed PoE fiber switch independently developed by ONV. It has 4*10/100M RJ45 ports and 2*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber combo ports. Port 1-4 can support IEEE 802.3 af/at PoE standard and single-port max PoE power is 30W. Each port can support wire-speed forwarding.

The ONV-POE31064PFM adopts a new generation of high-performance hardware and software platforms to provide flexible and cost-effective 100M access and uplink ports. It supports complete security protection mechanisms, complete ACL/ QoS policies, and flexible VLAN functions, and is easy to manage and maintain. As a PoE power supply devices can automatically detect and identify the power-receiving equipment that meets the standard and supplies power through the network cable. It can supply power to PoE terminal equipment such as wireless AP, IP camera, VoIP, and visual intelligent building intercom through the network cable, and meet the network environment that needs a high-density PoE power supply. It is suitable for hotels, campuses, parks, attractions, supermarkets, factory quarters, and small and medium-sized enterprises to form a cost-effective network.

FEATURE

■ **10/100M access, uplink Gigabit combo port**

◇ Support non-blocking wire-speed forwarding.

◇ Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.

◇ Support 10/100M RJ45 port and Gigabit combo 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 power supply standard, automatically identify PoE equipment for power supply.

◇ PoE port support priority. When the remaining power is insufficient, priority is given to ensuring the power supply of high-priority ports to avoid equipment overload.

◇ 4*10/100Base-TX RJ45 ports support PoE power supply to meet the PoE power supply needs of security monitoring, conference call systems, wireless coverage, and other scenarios.

◇ PoE remote network management. through the network management function, you can check the PoE port power, define the port power, and realize 7*24h automatic port scheduling, etc.

■ **Strong business processing capability**

◇ Support STP/ RSTP/ MSTP, eliminate layer 2 loops, and realize link backup.

◇ IEEE 802.1Q VLAN, users can divide VLAN according to needs, and support QinQ configuration.

◇ Static aggregation and dynamic aggregation, increase link bandwidth, realize load balancing, link backup, and improve link reliability.

◇ Support QoS, port-based, 802.1P-based, and DSCP-based three priority modes and four queue scheduling algorithms: Equ, SP, WRR, SP+WRR.

◇ Support ACL to filter data packets by configuring matching rules, processing operations, and time permissions, and provide flexible security access control strategies.

◇ Support IGMP V1/V2 multicast protocol, and IGMP Snooping meets the needs of multi-terminal high-definition video surveillance and video conferencing access.

■ **Security**

◇ Port isolation and storm control.

◇ Support IP+MAC+port+VLAN quadruple flexible combination binding function.

◇ Support 802.1X authentication to provide authentication functions for LAN computers, and

control the authorization status of controlled ports according to the authentication results.

■ **Stable and reliable**

◇ CCC, CE, FCC, RoHS.

◇ The user-friendly panel can show the device status through the LED indicator of PWR, PoE, and Link.

◇ Using self-developed power supply with high redundancy design provides long-term and stable PoE power output.

◇ Low power consumption, no fan, galvanized steel metal casing, and excellent heat dissipation to ensure the stable operation of the switch.

■ **Easy O&M management**

◇ CPU monitoring and memory monitoring.

◇ HTTPS, SSLV3, SSH V1/V2, and other encryption methods make management more secure.

◇ RMON, system logs, and port traffic statistics facilitate network optimization and transformation.

◇ LLDP facilitates the network management system to query and determine the communication status of the link.

◇ Web network management, SNMP (V1/V2/V3) and other diversified management and maintenance methods.

TECHNICAL SPECIFICATION

Model	ONV-POE31064PFM	ONV-POE31064PFM-at
Interface Characteristics		
Fixed Port	4*10/100Base-TX PoE ports (Data/Power) 2*10/100/1000M uplink RJ45 ports (Data) 2*1000M uplink SFP fiber combo ports (Data)	
Ethernet Port	Port 1-4 can support 10/100Base-T(X) and port 5-6 can support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/ MDI-X self-adaption	

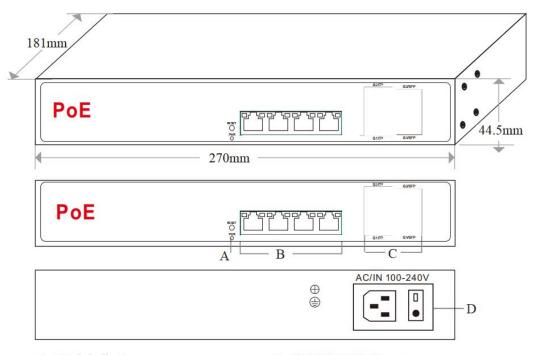|	
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	Gigabit optical fiber port, default no include optical module (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500m, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km
Chip Parameter	
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	14.8Gbps (non-blocking)
Forwarding Rate @64byte	3.57Mpps
CPU	150MHz
DRAM	256M
FLASH	128M
MAC	16K
Buffer Memory	4M
Jumbo Frame	10K
LED Indicator	PoE: PoE (Green), Rate: Speed (Green), Power: PWR(Green), Network: Link, Link/Act (Yellow)
PoE & Power Supply	
PoE Port	Port 1-4
PoE Management	Power delay start, PoE work, and time scheduling Port PoE working status display, Port PoE output power distribution
Power Supply Pin	1/2(+) 3/6(-)
Max Power Per Port	30W, IEEE 802.3 af/at
Total PWR / Input	65W/ (AC100-240V)	120W/ (AC100-240V)

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Voltage		
Power Consumption	Standby<5W, Full load<65W	Standby<5W, Full load<120W
Power Supply	Built in power supply, AC100~240V 50-60Hz, 1.0A	Built in power supply, AC100~240V 50-60Hz, 2.0A
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)	270*181*44.5mm	
Net /Gross Weight	1.2kg /1.7kg	1.4kg /1.9kg
Installation	Desktop, wall mount,19 inch 1U cabinet	
Certification & Warranty		
Lightning Protection	Port 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, lifetime maintenance.	
Network Management Feature		
Interface	IEEE802.3x flow control (Full duplex) Broadcast storm suppression based on port rate Limit the rate of packet traffic on incoming and outgoing ports, mini granularity is 64Kbps	
VLAN	4K VLAN based on port, IEEE802.1q, QinQ configuration, VLAN based on protocol	
Port Aggregation	Support LACP, manual aggregation Max 3 aggregation groups and 8 ports per group	
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)	
Multicast	MLD Snooping, Multicast VLAN IGMP Snooping v1/v2/v3, Max 64 multicast groups, Fast log out	

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Mirroring	Bidirectional traffic mirroring basic ports
QoS	Diff-Serv QoS, Priority mark/ remark Queue scheduling algorithm (SP, WRR, SP+WRR) 8*Output queues of each port, 802.1p/ DSCP priority mapping
ACL	L2-L4 packet filtering function, which can match the first 80 bytes of the message, provides ACLs defined based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, and VLAN.
Security	Port isolation, IP+MAC+port binding function, port broadcast storm suppression
DHCP	DHCP Client, DHCP Snooping, DHCP Relay
Management	NTP, One-key recovery, SNMP V1/V2/V3 System work log, Web Network Management (Https)

DIMENSION

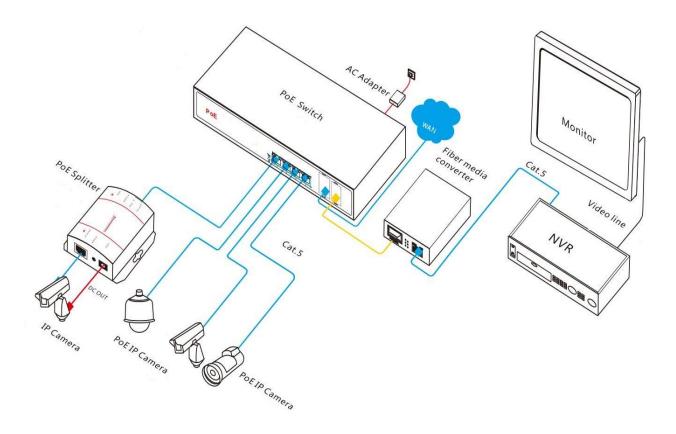A. Work indicator   B. 4*10/100M PoE ports
C. 2*10/100/1000M RJ45 ports and 2*1000M SFP fiber combo ports
D. Power input port AC100-240V, 50/60Hz

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APPLICATION

ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV-POE31064PFM	L2 managed PoE fiber switch with 4*10/100M RJ45 ports and 2*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber combo ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It built-in power supply and 1U/19" cabinet installation.	65W
ONV-POE31064PFM-at		120W
Note: The optical module is not included and needs to be purchased.		

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PACKING LIST

Content	Qty	Unit
6-port gigabit uplink managed PoE switch	1	SET
AC Power Cable	1	PC
Mounting Kit (Hanging Ear)	1	SET
User Guide	1	PC
Warranty Card	1	PC

(First column spanning: **Packing List**)

OPTICAL MODULE

Product	Model	Description	Unit
1.25G Optical Module	2630	SFP optical module, 1.25G multi-mode dual fiber 850nm, transmission distance: 550m, LC interface. supports DDM function and hot plugging.	PC
	2632	SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface. supports DDM function and hot plugging.	PC
	2612-T	SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC interface. supports DDM function and hot plugging.	PC
	2613-R	SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface. supports 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. supports 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. supports	PC

		DDM function and hot plugging.	
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

CONTACT US

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

Tel: 0086-755-33376606

Fax: 0086-755-33376608

Email:onv@onv.com.cn

Skype: onv@onv.com.cn

WeChat ID: ONV-PoE-IoT

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

9

+86 755 33376606
Optical Network Video Technologies (Shenzhen) Co., Ltd.