Product Datasheet

10-port Gigabit Uplink Managed PoE Switch

ONV-POE31108PFM

OVERVIEW

The ONV-POE31108PFM is a Gigabit uplink managed PoE fiber switch independently developed by ONV. It has 8*10/100M RJ45 ports and 2*1000M TP/SFP combo ports, Port 1-8 can support IEEE802.3af/at standard PoE power supply, and single port PoE power reaches 30W. The maximum PoE output power is 130W(at-250W). and each port can realize line-speed forwarding.

The POE31108PFM series adopts a new generation of high-performance hardware and software platforms to provide flexible and cost-effective 100Mbps 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 device, it can automatically detect and identify 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, visual intelligent building intercom through the network cable, and meet the network environment that needs high-density PoE power supply. It is suitable for hotels, campuses, parks, attractions, supermarkets, factory quarters and small and medium-sized enterprises form a cost-effective network.

FEATURE

■ **100Mbps access, Gigabit (TP/SFP) combo port uplink**

◇ All series supports "10/100M Ethernet port and Gigabit TP/SFP port " combination, which enables users to flexibly build networking to meet the needs of various scenarios.

◇ Support non-blocking wire-speed forwarding.

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

■ **Intelligent PoE power supply function**

◇ 8*10/100Base-TX RJ45 ports, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

◇ IEEE802.3af/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.

◇ PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

■ **Strong business processing capability**

◇ IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and QinQ configuration.

◇ QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.

◇ ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.

◇ IGMP V1/V2 and IGMP Snooping.

◇ ERPS/STP/RSTP/MSTP.

◇ Static and dynamic aggregation.

■ **Security**

◇ 802.1X authentication.

◇ Port isolation,Storm control.

◇   IP-MAC-VLAN-Port binding.

■   **Stable and reliable**

◇   CCC,CE, FCC, RoHS.

◇   Low power consumption, no fan mute design, galvanized steel metal casing.

◇   Self-developed power supply, high redundancy design, providing a long term and stable PoE power output.

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

■   **Easy operation and maintenance management**

◇   Web management, CLI command line (Console, Telnet).

◇   HTTPS, SSLV3, and SSHV1/V2.

◇   RMON, system log, LLDP, and port traffic statistics.

◇   CPU monitoring, memory monitoring.

TECHNICAL SPECIFICATION

Model	ONV-POE31108PFM	ONV-POE31108PFM-at
Interface Characteristics		
Fixed Port	8*10/100Base-TX PoE ports (Data/Power) 2*10/100/1000Base-T uplink RJ45 ports (Data) 2*1000M uplink SFP fiber slot ports (Data)	
Ethernet Port	Port 1-8 support 10/100Base-T(X) auto-sensing, Port 9-10 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 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter)	

	1000BASE-T: Cat5e or later UTP(≤100 meter)
SFP Slot Port	Gigabit SFP optical fiber interface, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Cable	Multi mode: 850nm 0 ~ 550M, 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, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	64Gbps (Non-blocking)
Forwarding Rate@64byte	4.17Mpps
MAC	16K
Buffer Memory	4.1M
Jumbo Frame	9.2K
CPU(Hz)	500M
DRAM	1G
Flash	128M
LED Indicator	Power:PWR(green), Data:Link(yellow), PoE:PoE(green)
Reset Switch	Yes, One-button factory reset
PoE & Power Supply	
PoE Port	Port 1 to 8 IEEE802.3af/at @ POE
PoE Management	PoE working status Delay start of power supply Scheduling of PoE operation and time Distribution for PoE output power of each port

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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	130W /(AC100-240V)	250W/ (AC100-240V)
Power Consumption	Standby<6W, Full load<130W	Standby<6W, Full load<250W
Power Supply	Built-in power supply, AC100~240V 50-60Hz 2.3A	Built-in power supply, AC100~240V 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)	270*181*44.5mm
Net /Gross Weight	<2.8kg /<3.5kg
Installation	Desktop type ,wall mounted,19 inch 1U cabinet installation

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	3 years, lifelong maintenance.

Network Management Features

| Interface	IEEE802.3X (Full duplex) Broadcast storm control based on port speed Speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
VLAN	4K VLAN based on port, IEEE802.1q QinQ configuration,VLAN based on protocol

Port Aggregation	LACP, Manual aggregation Support the largest 5 aggregation groups, each aggregation group supports 8 ports.
Spanning Tree	STP(IEEE802.1d), RSTP(IEEE802.1w), MSTP(IEEE802.1s)
Multicast	IGMP Snooping v1/v2/v3, Max 64 multicast groups Fast log out, MLD Snooping v1/v2, Multicast VLAN
Image	Bi-directional traffic mirroring supporting the basic port
QoS	Diff-Serv QoS 8*Output queues of each port 802.1p/DSCP priority mapping Queue Scheduling Algorithm (SP,WRR,SP+WRR) Priority Mark/Remark
ACL	L2-L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range and VLAN etc. Port-based Issuing ACL.
Security	Port isolation Broadcast storm control Port+MAC binding, IP+MAC+port binding
DHCP	DHCP Relay, DHCP Client, DHCP Snooping
Management	NTP Login Record SNMP V1/V2C/V3 One-key recovery Web Management (HTTPS)

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DIMENSION
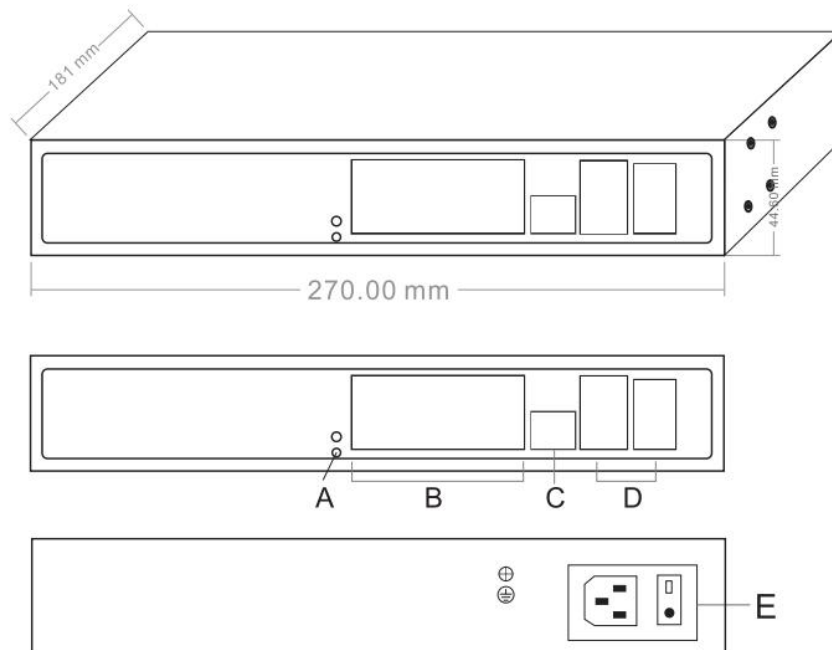
A.Working Indicator
B. 8*10/100M PoE Ports
C.Console Port
D.2*1000M Combo Ports
E.Power Input Port 100-240V AC,50/60Hz

APPLICATION

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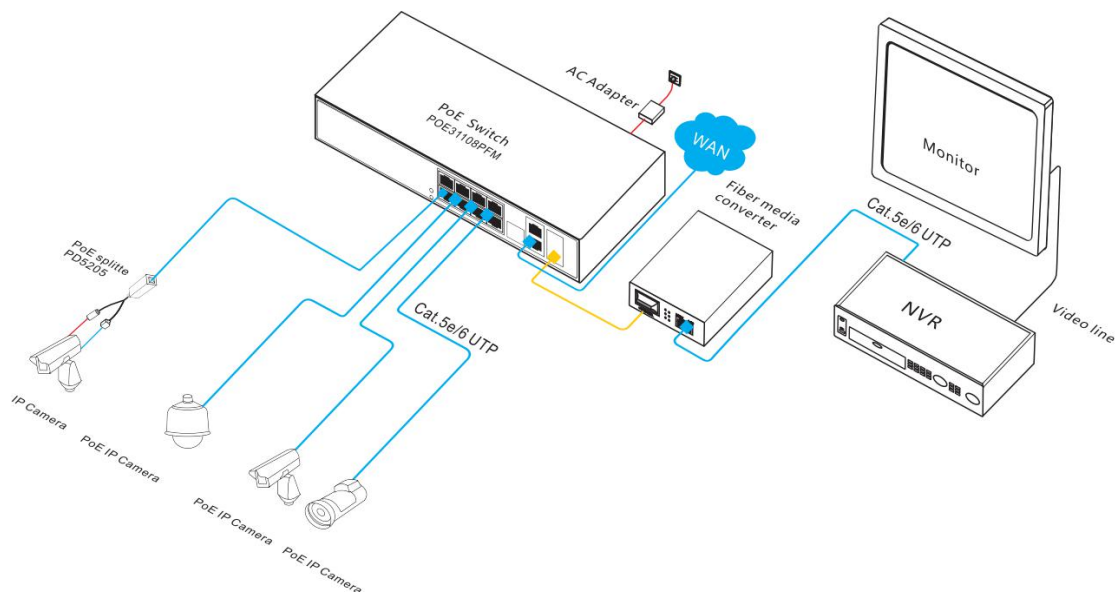
ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV-POE31108PFM	L2 managed PoE fiber switch with 8* 10/100M RJ45 ports and 2*10/100/1000M uplink RJ45 ports and 2*100/1000M SFP fiber slot ports(combo port), Port 1-8 can support IEEE802.3af/at PoE standard, Built-in 130W power supply. Support 1U/19 inch rack installation.	130W
ONV-POE31108PFM-at		250W

Note: The SFP optical module is not included by default and needs to be purchased separately.

PACKING LIST

PACKING LIST	CONTENT	QTY	UNIT
	10-Port gigabit uplink managed PoE switch	1	SET
	AC Power Cable	1	PC
	Mounting Kits	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

OPTICAL MODULE INFORMATION

Product	Model	Description	Unit
1.25G Optical Module	ONV-2630	SFP optical module, 1.25G, multi mode dual fiber 850nm, transmission distance: 550m, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2632	SFP optical module, 1.25G, single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2612-T	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2613-R	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-2612-T-SC	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
	ONV-2613-R-SC	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
Power Module	ONV-2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

CONTACT US

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