

## Managed PoE Switch with 16 PoE Ports 2 Gigabit Combo Ports (ONV-POE31016PFM)

### Managed PoE Switch with 16 Ethernet Ports and 2 Gigabit Combo Ports



- 16\*10/100BaseT RJ45 Ports (Support PoE)
- 2\*Sets of 10/100/1000M Gigabit Combo Ports
- Total power budget is 250W, max PoE power output is 30W.
- Support IP-MAC-Port-VID Binding ARP/IP/DoS Defend, 802.1X Authentication
- Support IEEE802.1Q VLAN, OoS, ACL, Spanning Tree and Multicast,
- Support Port Security, Port Monitoring, Port Isolation
- Support web management, SNMP

### Description

This ONV-POE31016PFM switch provides a network point for power supply and data transmission. All the 16 Ethernet ports can be connected with 10/100Mbps quickly, 2\*Sets of 10/100/1000M Gigabit Combo Ports, among which 1-16 ports can provide standard IEEE802.3af/at power supply. Due the advanced self-sensing algorithm supply power for IEEE802.3af/at terminal unit, there is no need to worry about damaging proprietary PoE or non-PoE standard equipment. In addition, it will stop power supply when PoE devices are not connected. In short, The ONV-POE31016PFM features simple and reliable design, automatic identification PoE requirements, duplex and high-speed.

This cost-effective ONV-POE31016PFM provides network layout need to simplify wireless access point (AP) and IP-based surveillance cameras network cameras in order to install in commercial network and home network. With high performance management system, including VLAN based on port, VLAN based on 802.1Q, QOS, IGMP Snooping, RSTP, Broadcast Storm Restraint, Port Aggregation, Port mirroring, Port management, SNMP, RADIUS, and NTP etc.

## Technical Specification

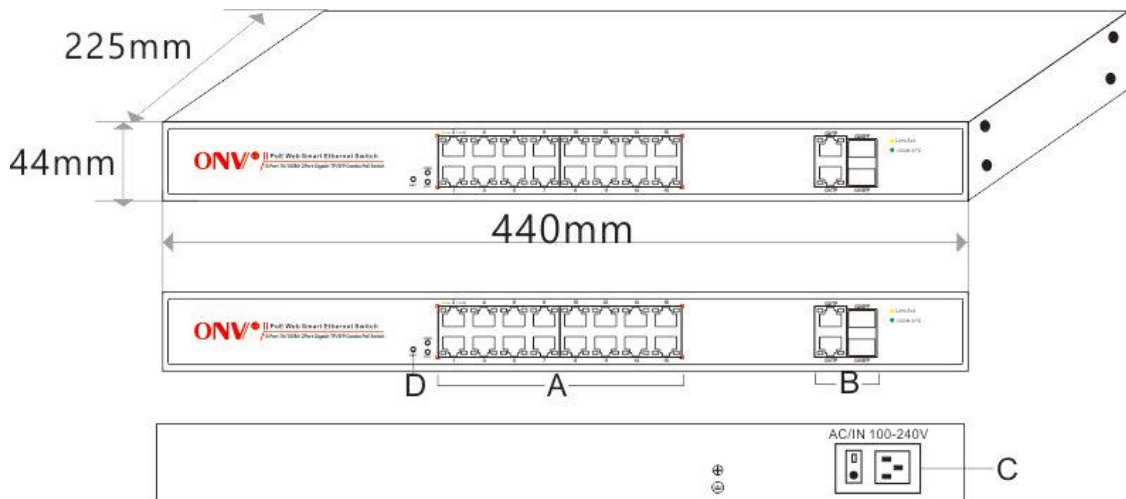
<b>Product Name</b>	Managed PoE Switch with 16 Ethernet Ports and 2 Gigabit Combo Ports
<b>Product Model</b>	ONV-POE31016PFM
<b>Connector</b>	16*10/100M copper cable RJ45 ports(all ports support MDI/MDIX) 2*gigabit combo ports
<b>Transfer Mode</b>	Store-And-Forward
<b>Network Medium</b>	10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 and more UTP(≤100 meter) 100BASE-FX:MMF,SMF 1000BASE-X: MMF, SMF
	Single mode(9/125um) optical transmission, transmission distance: 25km(double optical default, single optical alternative)
<b>Performance Specifications</b>	Bandwidth: 64Gbps (non-blocking) Network Latency (100 to 100M bps): maximum delay less than 20 microseconds Packet Buffer Memory: 4M Address Database Size: 16K Forwarding Rate: 6.55Mpps MTBF: 100,000 hours
<b>Network Protocols and Standards</b>	IEEE 802.3i 10BASET IEEE 802.3u 100BASETX IEEE 802.3x Flow Control IEEE802.3ab IEEE802.3z IEEE 802.3af /at
<b>LEDs Status</b>	System: power supply Every Port: connecting, PoE working status
<b>Power</b>	Maximum PoE power:250W PoE port power:30W max Power input: AC100-240V 50/60Hz; (every country use a custom power plug)
<b>Dimensions</b>	440*225*44mm
<b>Working Environment</b>	Operating Temperature: -20 ° ~ 55 ° C Storage Temperature: -40 ° ~ 75 ° C Humidity: 10% ~ 90%, non-condensing Storage Humidity: 5% ~ 95%, non-condensing Working Altitude: 3000 m (10,000 ft) Storage Altitude: 3,000 m (10,000 ft)
<b>Certification</b>	CE, FCC, RoHS
<b>Warranty</b>	1 year warranty

## Managed Specification

Layer 2 Switching	
Spanning Tree Protocol (STP)	Standard Spanning Tree 802.1d Rapid Spanning Tree (RSTP) 802.1w MSTP (Multi-Service Transfer Platform)
Aggregation	Link Aggregation Control Protocol (LACP) IEEE 802.3ad;
VLAN	Support up to 4K VLANs simultaneously (out of 4096 VLAN IDs) ; Port-based VLAN; 802.1Q tag-based VLAN
IGMP v1/v2 snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters; supports 1024 multicast groups (source-specific multicasting is not supported)
Security	
Secure Shell (SSH) Protocol	SSH secures Telnet traffic in or out the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL), HTTPS	SSL encrypts the http traffic, allowing advance secure access to the browser-based management GUI in the switch
Port Security	Locks MAC Addresses to ports, and limits the number of learned MAC addresses
DHCP Snooping	prevent unauthorized configuration and use of IP addresses, while providing support for IP Source Guard and ARP detection
IP Source Guard	Prevents datagram with spoofed addresses from being in the network
ARP Inspection	Prevent ARP spoofing attacks and ARP
Storm control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
ACLs	Support for up to 256 entries; Drop or rate limitation based on source and destination MAC, VLAN ID or IP address, protocol, port, differentiated services code point (DSCP) / IP precedence, TCP/ UDP source and destination ports, 802.1p priority, Ethernet type, Internet Control Message Protocol (ICMP) packets, IGMP packets, TCP flag
Quality of Service	
Hardware Priority Queue	Support 8 hardware queues
Scheduling	8 COS queues per port support strict priority and weighted round-robin (WRR)
Classification	Port based; 802.1p(PCP) VLAN priority based;
Rate Limiting	Ingress policer;egress shaping and rate control;per VLAN,per port and flow based
Management	
Web GUI interface	(Web/ SSL, Telnet/ SSH, ping, Trivial File Transfer Protocol (TFTP), SNMP, Syslog) Built-in switch configuration utility for browser-based device configuration (HTTP/ HTTPS). Supports configuration, system dashboard, maintenance, and

	monitoring
Firmware upgrade	Web browser upgrade (HTTP/ HTTPS) and TFTP; Upgrade through console port as well
Port mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to <b>N-1 (N is Switch's Ports)</b> ports can be mirrored to single destination port. A single session is supported.
Other management	Single IP management; HTTP/HTTPS; SSH; RADIUS; DHCP Client; SNMP; cable diagnostics; ping; syslog; Telnet client (SSH secure support)
<b>Green Ethernet</b>	
Green and Energy-saving Ethernet (EEE)	Compliant IEEE802.3az Energy Efficient Ethernet Task Force. Automatically turns off power on Gigabit Ethernet RJ-45 port when detecting link down or Idle of client. Active mode is resumed without loss of any packets when the switch detects the link up
Cable length detection	Adjusts the signal strength based on the cable length. Reduces the power consumption for cables shorter.
<b>General</b>	
Jumbo frames	Frame sizes up to 10KB supported on Gigabit interfaces
MAC Table	16K MAC addresses.
<b>Discovery</b>	
Link Layer Discovery Protocol (LLDP)	Used by network devices for advertising their identities, capabilities, and neighbors on a IEEE 802 local area network, principally wired Ethernet.

## Dimension



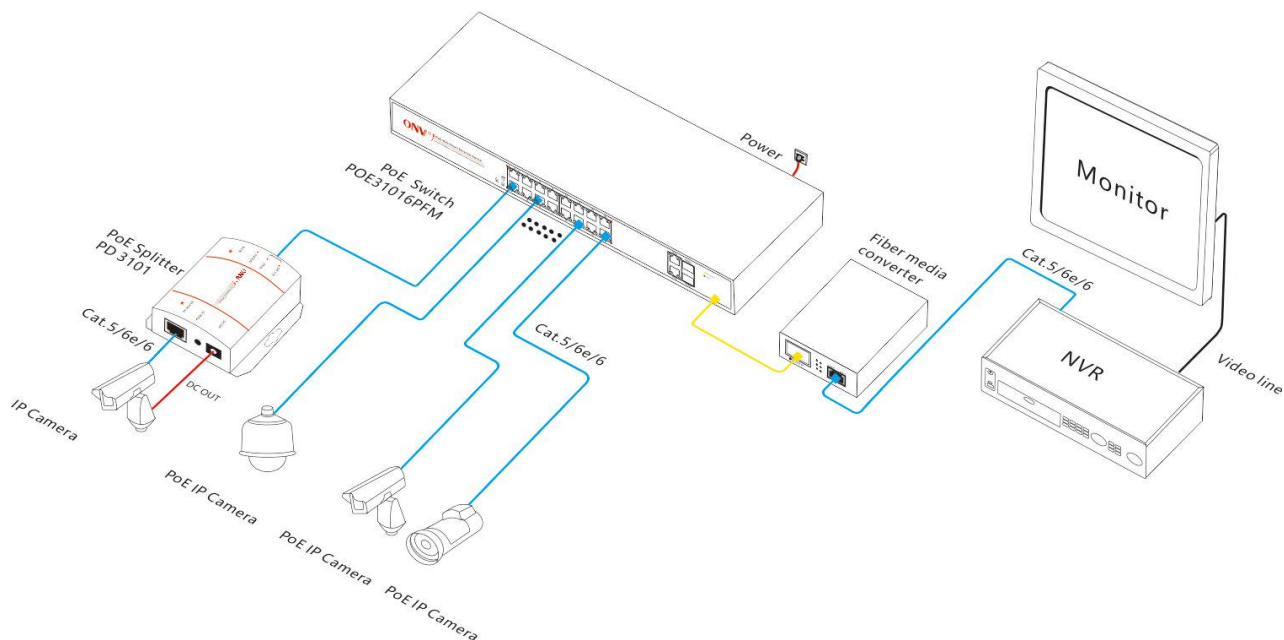
A. 16\*PoE Ports

B. 2\*Sets Combo Ports

C. 100-240VAC, 50/60Hz

D. Reset

Application



Ordering Information

**Product Model:** ONV-POE31016PFM

**Product Description:** 16\*10/100M Ethernet ports + 2\*Gigabit Combo ports Managed PoE switch, and 1-16 ports supports IEEE802.3af/at. Max PoE power for each port ups to 30W, total power is 250W.

**Ordering Notes:** PoE default power supply is end-span (1/2, 3/6 line pair), mid-span(4/5, 7/8 line pair) PoE Power supply can be customized

Packing List

Packing List	Managed PoE Switch with 16x PoE Ports and 2x Gigabit Combo Ports (ONV-POE31016PFM )
	Power Cable
	Mounting Kits
	User Guide
	Warranty Card

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