Product Datasheet

28-Port 10G Uplink Managed Ethernet Fiber Switch

ONV36028FM

OVERVIEW

The ONV36028FM series is a 10G uplink managed Ethernet fiber switch independently developed by ONV. It has 24*10/100/1000Base-T RJ45 ports and 4*1/10G SFP+ fiber slot ports. Each port can support wire-speed forwarding.

The ONV36028FM has L2+ full network management function, supports IPV4/IPV6 management, static route full line rate forwarding,complete security protection mechanism, complete ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS(<20ms) to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important Uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as port traffic control, VLAN division, and SNMP through the Web network management mode. It satisfies high-density network

application environment and is suitable for medium, large-scale scenes such as hotel, campus, park, shopping mall, scenic spot, hospital, bank to form an economical, efficient and reliable communication network.

FEATURE

■ **Full Gigabit access, 10G SFP+ fiber port uplink**

◇ All series supports "Gigabit Ethernet port and 10G SFP+ fiber slot 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.
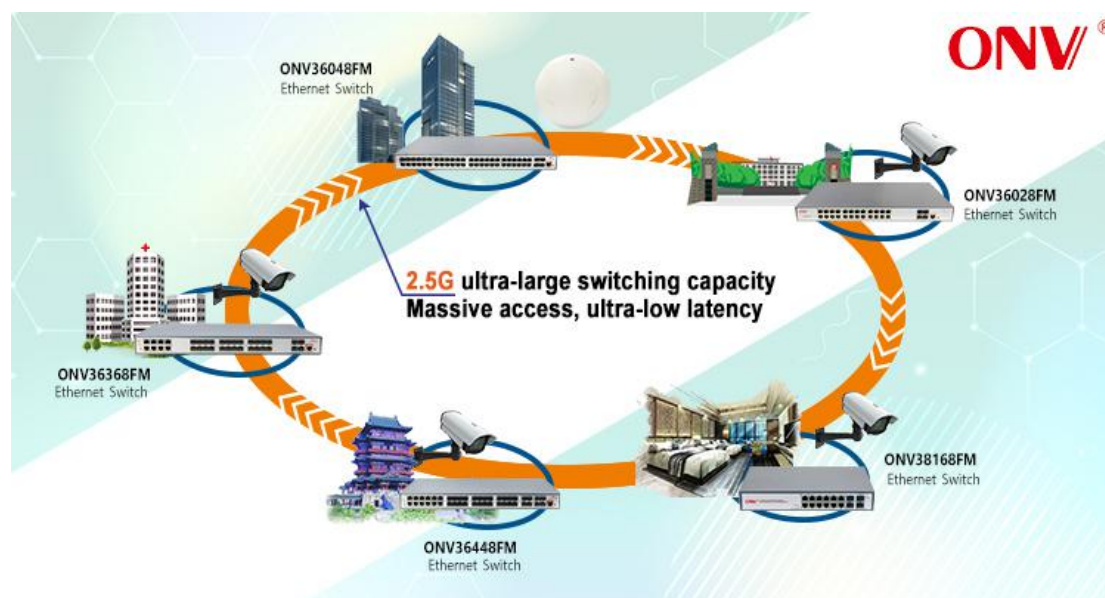
■ **Strong business processing capability**

◇ 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.

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◇ IGMP V1/V2 and IGMP Snooping.

◇ ERPS/STP/RSTP/MSTP.

◇ Static and dynamic aggregation.
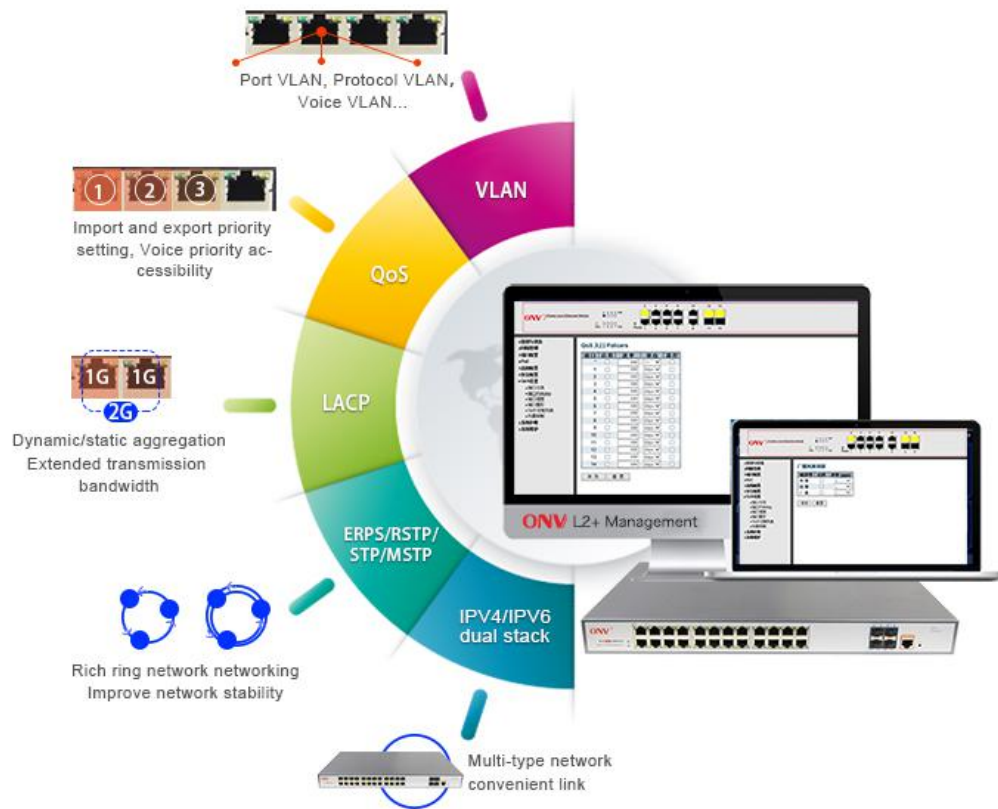
■ **Security**

◇ 802.1X authentication.

◇ Port isolation,Storm control.

◇ IP-MAC-VLAN-Port binding.
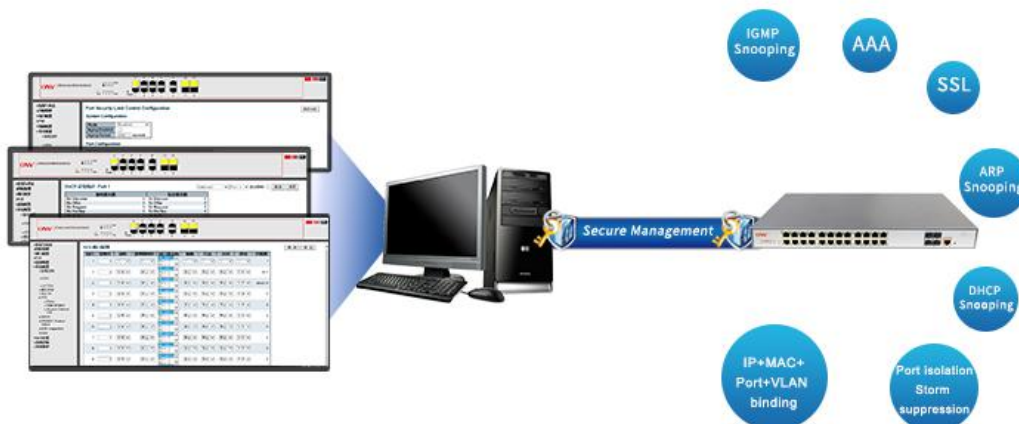
■ **Stable and reliable**

◇ Low power consumption, galvanized steel casing, The fan active cooling.

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

◇ CCC,CE, FCC, RoHS.

◇ The user-friendly panel, it can show the device status through the LED indicator of PWR, SYS, Link, L/A.
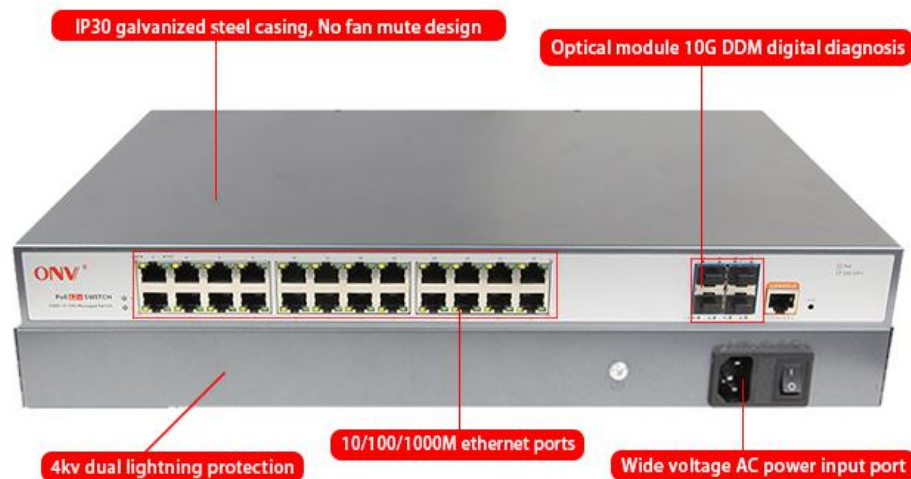
■ **Easy operation and maintenance management**

◇ Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).

◇ HTTPS, SSLV3, and SSHV1/V2.

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

◇ CPU monitoring, memory monitoring, Ping test, and cable diagnose.

TECHNICAL SPECIFICATION

Model	ONV36028FM	ONV38028FM

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Interface Characteristics

Fixed Port	24*10/100/1000Base-T RJ45 ports (Data) 4*1/10G RJ45 ports (Data) 1*Console RS232 port (115200,N,8,1)
Ethernet Port	Port 1-24 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	10G SFP+ optical fiber interface, default not matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
SFP Port Expansion	Turbo overclocking 2.5G optical module and ring
Optical Cable/ Distance	Multi mode: 850nm / 0 ~ 500M(1.25G), 0-300M(10G), single mode: 1310nm /0 ~ 40KM, 1550nm 0 ~ 120KM.

Chip Parameter

Network Management Type	L2+	L3
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3ae 10GBase-SR/LR IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	598Gbps	
Forwarding Rate@64byte	95.23Mpps	
MAC	32K	
Buffer Memory	32M	

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Jumbo Frame	9.6K
LED Indicator	Power: PWR (yellow), system: SYS(yellow), Network: Link (yellow), fiber port: L/A (green)
Reset Switch	yes, support one key to restore factory settings
Power	
Total PWR / Input Voltage	60W/AC100-240V)
Power Consumption	Standby<25W, Full Load<35W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 1.0A
Physical Parameter	
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)	440*290*44.5mm
Net /Gross Weight	<3.5kg / <4.0kg
Installation	Desktop, 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) Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed

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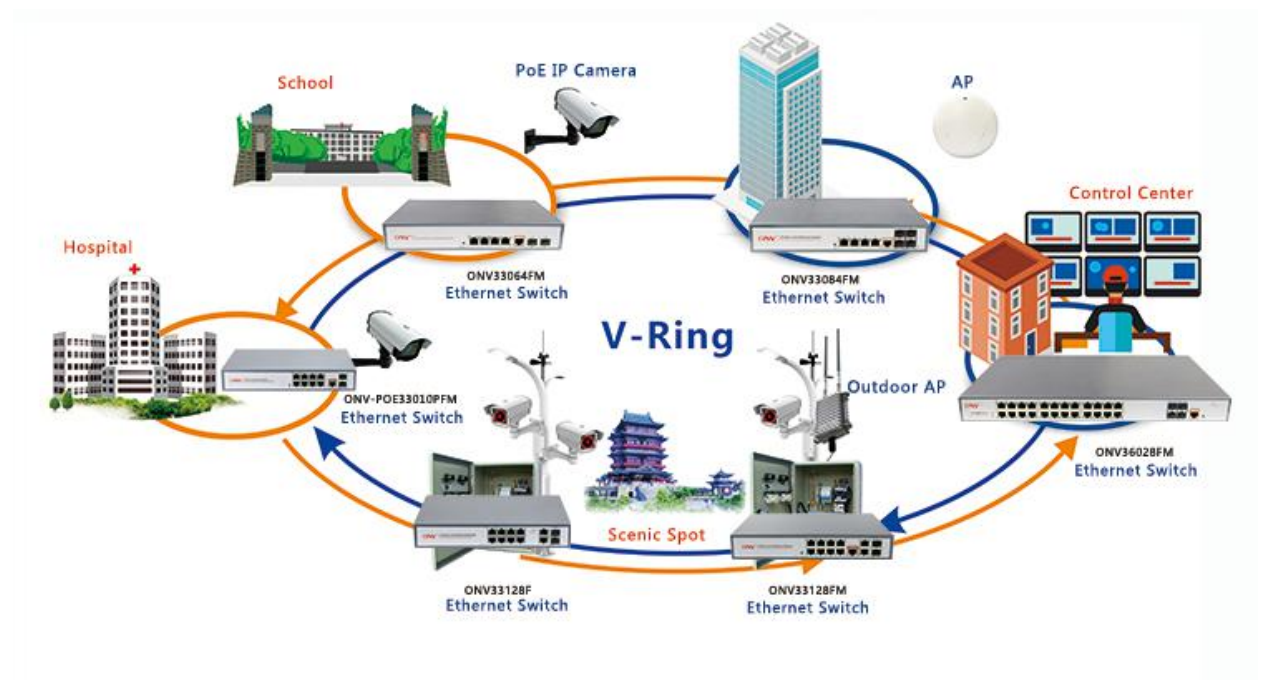|		
	The speed limit of the message flow in the access port.	
	The minimum particle size is 64Kbps.	
Layer 3 Features	L2+ network management , IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs	L3 network management , IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	VLAN based on MAC VLAN based on the protocol Voice VLAN, QinQ configuration 4K VLAN based on port, IEEE802.1q Port configuration of Access, Trunk, Hybrid	
Port Aggregation	LACP, Static aggregation Max 14 aggregation groups and 8 ports per group.	
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)	
Industrial Ring Network Protocol	G.8032 (ERPS),Recovery time less than 20ms 255 Ring at most, Max 1024 devices per ring.	
Multicast	MLD Snooping v1/v2,Multicast VLAN IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out	
Port Mirroring	Bidirectional data mirroring based on port	
QoS	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS,Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)	
ACL	Port-based Issuing ACL,ACL based on port and VLAN L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP	

	Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	IP-MAC-VLAN-Port binding ARP inspection,Anti-DoS attack AAA & RADIUS,MAC learning limit Mac black holes,IP source protection IEEE802.1X & MAC address authentication Broadcast storm control,Backup for host datum SSH 2.0,SSL,Port isolation,ARP message speed limit User hierarchical management and password protection
DHCP	DHCP Client,DHCP Snooping,DHCP Server,DHCP Relay
Management	One-key recovery Cable Diagnose,LLDP Web Management (HTTPS) NTP,System work log,Ping Test CPU instant utilization status view Console/AUX Modem/Telnet/SSH2.0 CLI Download & Management on FTP, TFTP, Xmodem, SFTP,SNMP V1/V2C/V3 ONV NMS - smart network management system platform(LLDP+SNMP)
System	Category 5 Ethernet network cable Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later; TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

DIMENSION
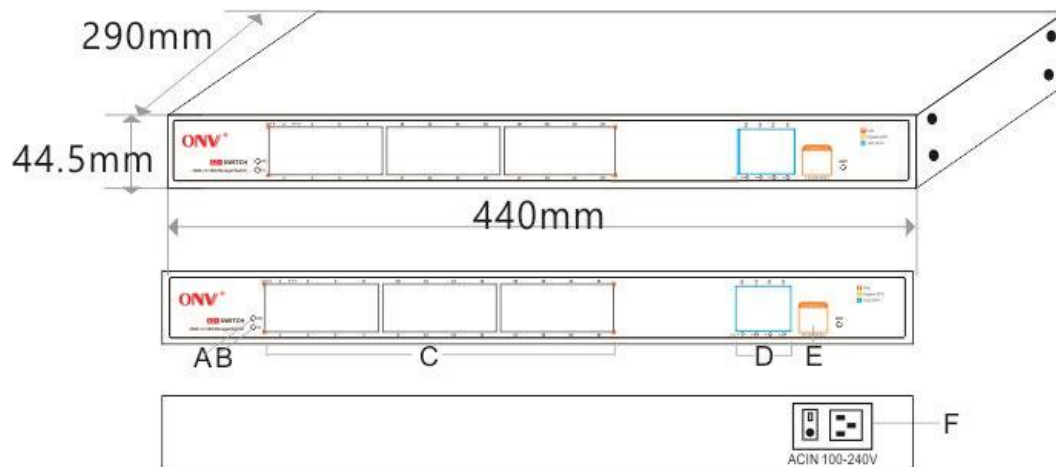
A. Power working indicator   B. System working indicator
C. 24*10/100/1000M RJ45 ports   D. 4*1/10G SPF+ ports
E. Console port
F. Power input port AC100-240V 50/60Hz

APPLICATION

ORDERING INFORMATION

Model	Description
ONV36028FM	L2+ managed Ethernet aggregation /core fiber switch with 24* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports, Built-in 60W power supply. Support 1U/19 inch rack installation.
ONV38028FM	L3 managed Ethernet aggregation /core fiber switch with 24* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports, Built-in 60W power supply. Support 1U/19 inch rack installation.
Note: Ethernet fiber switch does not match the optical module by default.	

PACKING LIST

	CONTENT	QTY	UNIT
PACKING LIST	28-port 10G uplink managed Ethernet fiber switch	1	SET
	AC Power Cable	1	PC
	RJ45-DB9 Line	1	PC
	Mounting Kits(Hanging Ear)	1	SET
	User Guide	1	PC
	Warranty Card	1	PC

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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

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10G Optical Module	ONV-6630	SFP+ optical module,10G Multi-mode dual fiber 850nm, transmission distance: 300m, LC interface, support DDM function,support hot plug and pull.	PC
	ONV-7832	SFP+ optical module,10G Single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-7832-33	SFP+ optical module,10G Single-mode single fiber TX1330nm/RX1270nm , transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-7832-27	SFP+ optical module,10G Single-mode single fiber TX1270nm/RX13300nm , transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC

RELATED PRODUCT

Model	Description
ONV36168FM	L2+ managed Ethernet aggregation fiber switch with 12* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports, Built-in 30W power supply. Support 1U/19 inch rack installation.
ONV36032FM	L2+ managed Ethernet aggregation fiber switch with 4* 10/100/1000M RJ45 ports and 24* 100/1000M SFP fiber slot ports and 4*1/10G SFP+ fiber slot ports, Built-in 60W power supply. Support 1U/19 inch rack installation.
ONV36036FM	L2+ managed Ethernet aggregation fiber switch with 24* 10/100/1000M RJ45 ports and 8* 100/1000M SFP fiber slot ports and 4*1/10G SFP+ fiber slot

	ports, Built-in 60W power supply. Support 1U/19 inch rack installation.
ONV36448FM	L2+ managed Ethernet aggregation fiber switch with 12* 10/100/1000M RJ45 ports and 28* 100/1000M SFP fiber slot ports and 4*1/10G SFP+ fiber slot ports, Built-in 60W power supply. Support 1U/19 inch rack installation.
ONV36048FM	L2+ managed Ethernet aggregation fiber switch with 44* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports, Built-in 60W power supply. Support 1U/19 inch rack installation.

CONTACT US

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