Product Datasheet

36-port Gigabit Uplink Managed Ethernet Fiber Switch

ONV31368FM

OVERVIEW

The ONV31368FM is a gigabit uplink managed Ethernet fiber switch independently developed by ONV. It has 24*100M SFP fiber slot ports and 4*100/1000M uplink SFP fiber slot ports and 8*10/100/1000M RJ45 ports. Each port can support wire-speed forwarding.

ONV31368FM adopts a new generation of high-performance hardware and software platforms to provide flexible and cost-effective 10/100M access and uplink ports. It supports complete security protection mechanisms, comprehensive ACL / QoS policies, and flexible VLAN functions. Easy to manage and maintain, meeting users' requirements for easy management of network equipment, high security, and low cost. At the same time, it can meet the multi-channel video intercom, monitoring, and wireless coverage network application environment. It is suitable for hotels, campuses, parks, commercial supermarkets, scenic spots, factory dormitories, and SMB small and medium-sized enterprises to form cost-effective networks.

FEATURE

■ **Multi-fiber port 100M access, gigabit SFP uplink**

◇ Support SFP fiber port and gigabit RJ45 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 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.

◇ 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, galvanized steel metal casing.

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

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

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■ **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	ONV31368FM
Interface Characteristics	
Fixed Port	24*100M SFP fiber ports (Data) 8*10/100/1000M RJ45 ports (Data) 4*100/1000M SFP fiber ports(Data) 1*Console RS232 port (115200,N,8,1)
Ethernet Port	Port 1-8 support 10/100/1000Base-T automatic detection, full / half duplex MDI/MDI-X adaptive
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	100M /Gigabit SFP optical fiber interface, default matching optical modules (optional order 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 Management Type	L2

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Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX/FX, IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	368Gbps (non-blocking)
Forwarding Rate@64byte	21.43Mpps
MAC	16K
Buffer Memory	16M
Jumbo Frame	9.6K
CPU	500M
DRAM	2G
Flash	128M
LED Indicator	Power: PWR (Yellow), System:SYS(Yellow), Network: Link(Yellow), Fiber port: L/A (Green)
Reset Switch	Yes, One-button factory reset
Power Supply	
Total PWR / Input Voltage	60W (AC100-240V)
Power Consumption	Standby<20W, Full Load<45W
Power Supply	Built-in power supply, AC100~240V 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	<3.2kg / <3.8kg

Installation	Desktop, 19 inch 1U cabinet
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 The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol VLAN based on MAC Voice VLAN, QinQ configuration Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 18 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)
ERPS Networking Protocol	G.8032 (ERPS), Recovery time less than 20ms 250 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

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	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
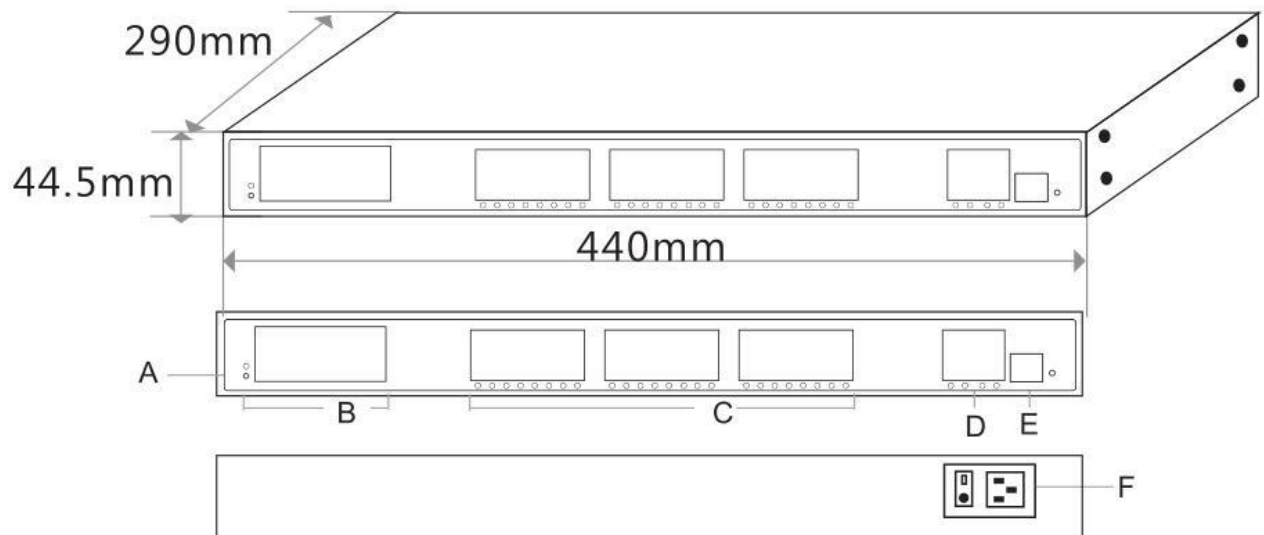
A. Working Indicate   B. 8*10/100/1000M RJ45 ports

C. 24*100M SFP ports   D. 4*100/1000M SFP ports

E. Console port   F. Power input port AC100-240V,50/60Hz

APPLICATION
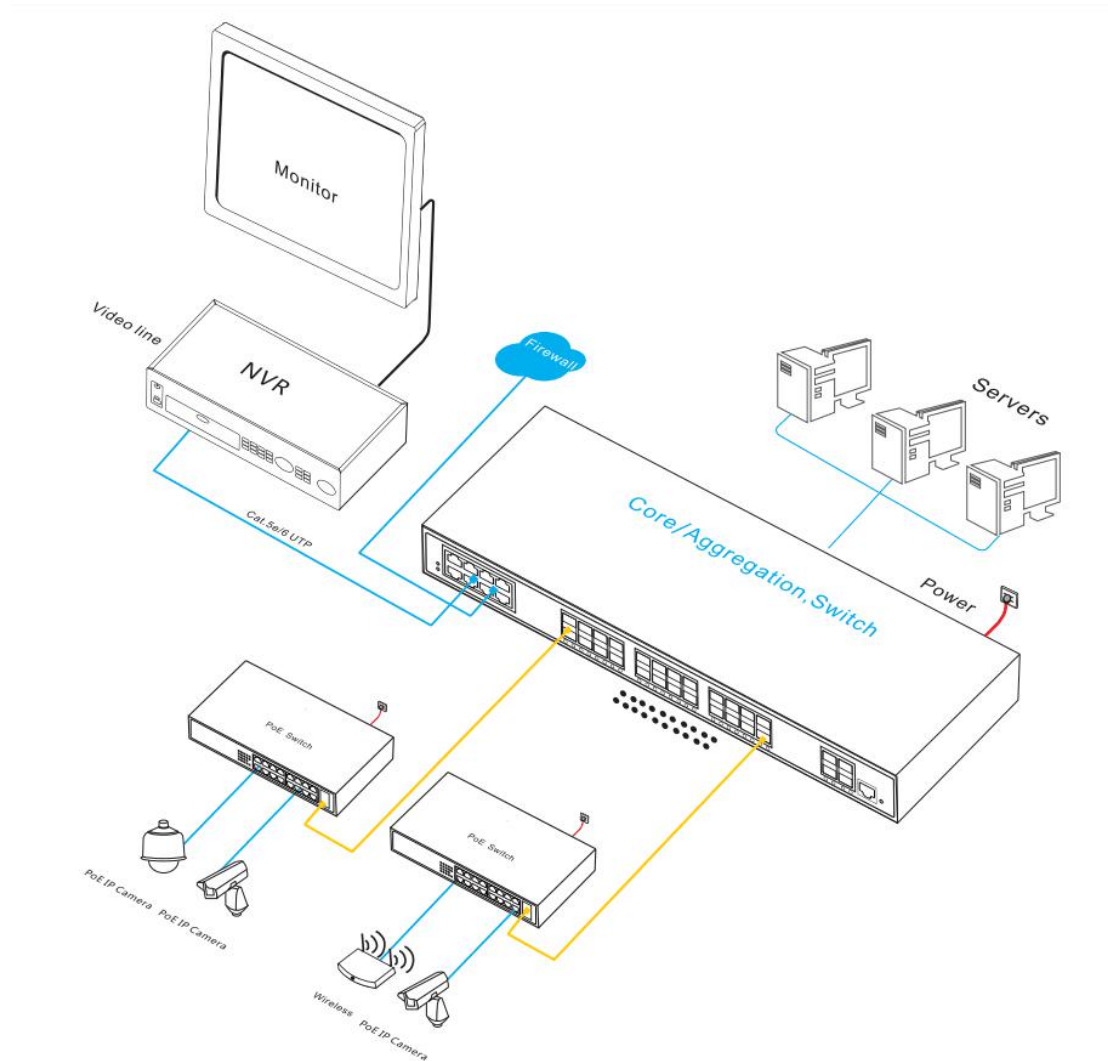
ORDERING INFORMATION

Model	Description
ONV31368FM	L2 managed Ethernet fiber switch with 8*10/100/1000M RJ45 ports and 24*100M SFP fiber ports and 4*100/1000M SFP ports, Built-in 60W power supply. Support 1U/19 inch rack installation.
Note: The Ethernet switch is not included SFP optical module by default and needs to be purchased separately.	

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PACKING LIST

	CONTENT	QTY	UNIT
PACKING LIST	36-port gigabit 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

OPTICAL MODULE INFORMATION

Product	Model	Description	Unit
155M Optical Module	ONV-5315-114	SFP optical module, 155M, single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-1313-T-3.3V	SFP optical module, 155M, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	ONV-1315-R-3.3V	SFP optical module, 155M, single-mode single fiber TX1550nm/RX1310nm,transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
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

10	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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