Product Datasheet

36-port 10G Uplink Managed Ethernet Fiber Switch

(ONV56368FM)

OVERVIEW

The ONV56368FM is a 10G uplink L2+ managed Ethernet fiber switch independently developed by ONV. It has 8*10/100/1000Base-T RJ45 or 8*100/1000Base-X SFP (combo ports) and 16*100/1000Base-X SFP ports and 4*1/10G SFP+ fiber slot ports. Each port can support wire-speed forwarding.

The ONV56368FM has L2+ full network management function, supports IPV4/ IPV6 management, static route full wire-speed 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

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

◇ Support non-blocking wire-speed forwarding.

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

◇ Supports Gigabit Ethernet port and gigabit SFP fiber slot port and 1/10G SFP+ fiber slot port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

■ **Strong business processing capability**

◇ ERPS/STP/RSTP/MSTP.

◇ Static and dynamic aggregation.

◇ IGMP V1/V2 and IGMP Snooping.

◇ 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.

■ **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 casing, with fan.

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

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

■ **Easy operation and maintenance management**

◇ HTTPS, SSLV3, and SSHV1/V2.

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

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

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

TECHNICAL SPECIFICATION

Model	ONV56368FM
Interface Characteristics	
Fixed Port	1*Console RS232 port (115200,N,8,1) 4*1/10G SFP+ fiber slot ports (Data) 16*100/1000Base-X SFP ports (Data) 8*10/100/1000Base-T RJ45 or 8*100/1000Base-X SFP combo port (Data)
Ethernet Port	Port 1-8 support 10/100/1000Base-T(X) 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/6 or later UTP(≤100 meters)
Optical Fiber Port	Gigabit SFP optical fiber port and 10G SFP+ optical fiber port, default no include optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Fiber Port Expansion	Support Turbo overclocking 2.5G optical module expansion and ring network
Optical Cable/	Multi-mode:850nm//0-500M(1G), 850nm/0-300M (10G)

Distance	Single-mode:1310nm/ 0-40KM, 1550nm/ 0-120KM.
Chip Parameter	
Network Management Type	L2+
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-LR/SR, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	336Gbps
Forwarding Rate@64byte	95.23Mpps
CPU(Hz)	800MHz
DRAM	1Gbit
Flash	128Mbit
MAC	16K
Buffer Memory	12Mbit
Jumbo Frame	12000byte
LED Indicator	Power: PWR (Yellow), System: SYS(Yellow), Network: Link (Yellow), Fiber port: L/A (Green)
Reset Switch	Yes, press and hold the switch for 10 seconds and release it to restore the factory settings
Power Supply	
Total PWR / Input Voltage	60W/(AC100-240V)
Power Consumption	Standby<20W, Full Load<45W
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 1.0A
Physical Parameter	
Operation TEMP /	-20~+55°C, 5%~90% RH Non condensing

Humidity	
Storage TEMP / Humidity	-40~+80°C, 5%~95% RH Non condensing
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	<3.5kg / <4.3kg
Installation	Desktop, 19 inch 1U cabinet installation

Certification & Warranty

Lightning Protection	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, lifelong maintenance.

**Network Management Features**

Interface	IEEE802.3x flow control (full duplex)
	Port exception protection mechanism
	Port real-time flow management (Flow Interval)
	Broadcast storm suppression based on port rate
	Optical port SFP module DDMI real-time digital diagnosis
	Limit the rate of incoming and outgoing packet traffic, with a minimum granularity of 16Kbps and a maximum of 1Gbps
	Port EEE Green Ethernet Energy-Saving configuration and status view
	Jumbo frame configuration, the largest 12000byte
Layer 3 Features	OSPFv1/v2, OSPFv3, Static routing, RIPv1/v2, RIPng
	The maximum number of ARP protocol entries is 1024
	L2+ network management function, Dual stack IPv4/IPv6 management
VLAN	VLAN based on MAC, VLAN based on the protocol
	Port configuration of Access, Trunk, Hybrid, GVRP VLAN protocol (4K) VLAN based on port, IEEE802.1q, Voice VLAN, QinQ configuration
Port Aggregation	LACP, Static aggregation
	Max 14 aggregation groups and 8 ports per group.

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Spanning Tree	STP BPDU Guard, BPDU filtering and BPDU forwarding STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
ERPS Ring Network	Support ERPS ring network, ring network self-healing time is less than 20ms, ITU-T G.8032
Multicast	MLD Snooping, IGMP Snooping, Multicast VLAN User quick log out, MVR (Multicast LAN registration) IGMP Snooping v1/v2/v3 and 1024 multicast groups at most
Mirroring	Bidirectional traffic mirroring for basic ports Supports 1-to-multiple mirroring, supports up to 4 port sessions
QoS	Queue Scheduling Algorithm (SP, WRR, SP+WRR) Flow-based Rate Limiting, Stream based redirection Flow-based Packet Filtering, 8*Output queues of each port 802.1p/DSCP priority mapping, Diff-Serv QoS, Priority Mark/Remark
ACL	ACL distribution based on port and VLAN L2-L4 packet filtering function, matching the first 80 bytes message, and provides ACL definitions based on source MAC address, destination MAC address, source IP address, destination IP address, IP protocol type, TCP/UDP port, TCP/UDP port range, VLAN, etc.
Security	Port based IEEE802.1X authentication SSL guarantees data transmission security Quad binding function of IP+MAC+VLAN+ports MAC address learning limit, MAC address black hole Anti DoS attack, Port broadcast message suppression IP Source Guard function, AAA&RADIUS certification Hierarchical user management and password protection SSH 2.0 provides a secure encrypted channel for user login Host data backup mechanism, ARP intrusion detection function Port isolation, IP Source Guard, ARP message speed limit function
DHCP	DHCP Client, DHCP Snooping, DHCP Server

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Management	Web network management (https) Link Layer Discovery Protocol(LLDP) Viewing CPU Instant Utilization Status NTP clock, One click restore, SNMP V1/V2C/V3 Cable status check, Ping detection, System work log ONV NMS platform cluster management (LLDP+SNMP) Console/AUX Modem/Telnet/CLI command line configuration FTP, TFTP, Xmodem, SFTP file upload and download management
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

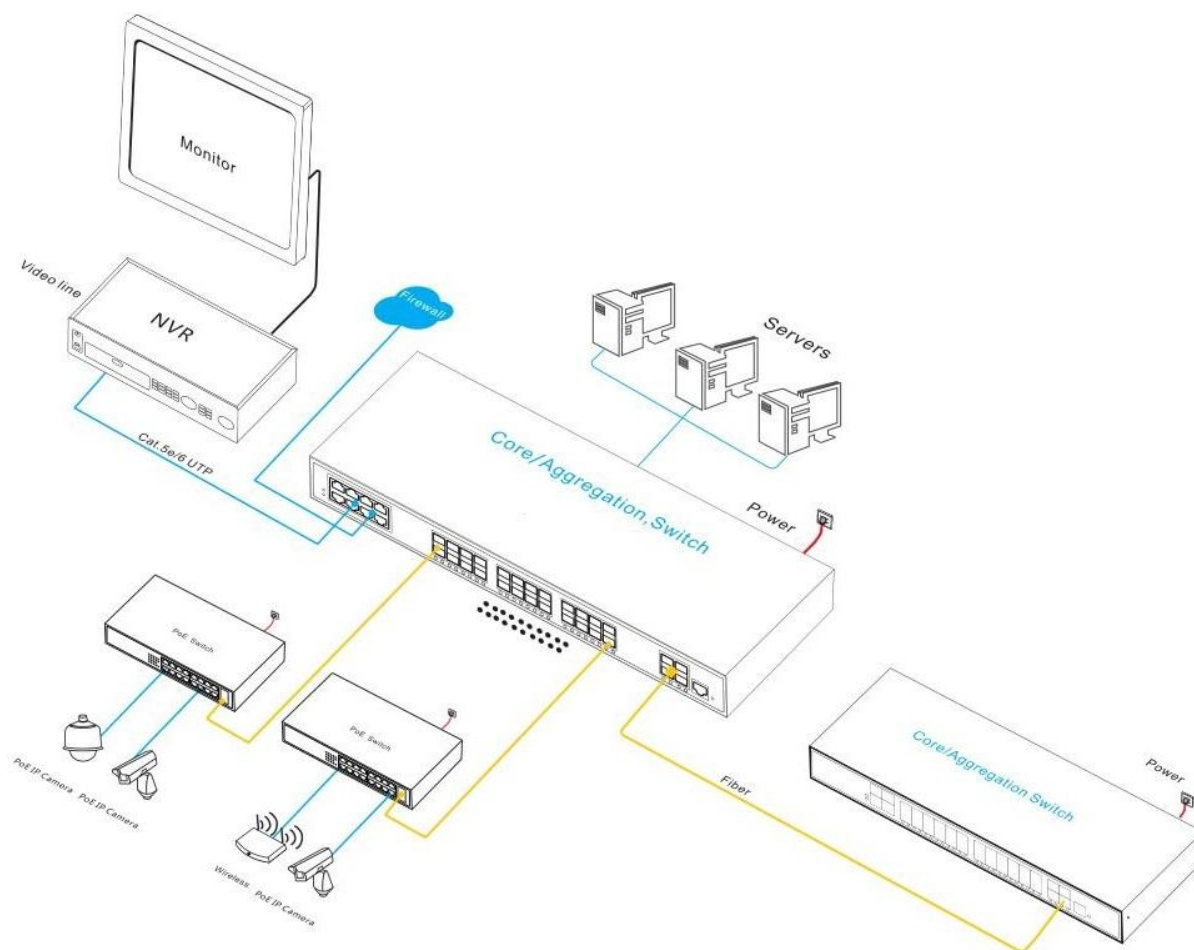## DIMENSION
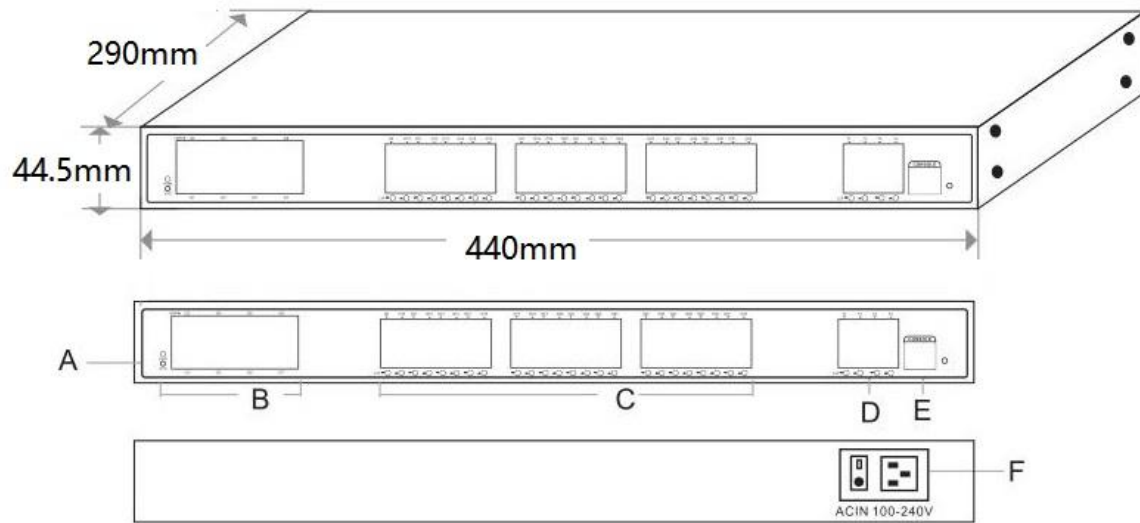
A. Working indicate

B. 8*10/100/1000M RJ45 ports

C. 24*100/1000M SFP ports

D. 4*10G SFP+ ports

E. Console port

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

APPLICATION

ORDERING INFORMATION

Model	Description	Built-in Power Supply
ONV56368FM	L2+ managed Ethernet aggregation /core fiber switch with 8*10/100/1000Base-T RJ45 or 8*100/1000Base-X SFP (combo ports) and 16*100/1000Base-X SFP ports and 4*1/10G SFP+ fiber slot ports. Support 1U/19 inch rack installation.	60W

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

PACKING LIST

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Packing List	Content	Qty	Unit
	36-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

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, support DDM function, support hot plug and pull.	PC
	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
	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
	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
	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
	2613-R-SC	SFP optical module, 1.25G, single-mode single fiber	PC

		TX1550nm/RX1310nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	
Power Module	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC
10G Optical Module	6630	SFP+ optical module,10G multi-mode dual fiber 850nm, transmission distance: 300m, LC interface, support DDM function,support hot plug and pull.	PC
	7832	SFP+ optical module,10G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	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
	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
ONV56028FM	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.
ONV56036FM	L2+ managed Ethernet aggregation /core fiber switch with 8*10/100/1000Base-T RJ45 or 8*100/1000Base-X SFP (combo ports) and 16*10/100/1000Base-T RJ45 ports and 4*1/10G SFP+ fiber slot ports. Built-in 60W power supply. Support 1U/19 inch rack installation.
ONV56052FM	L2+ managed Ethernet aggregation fiber switch with 48*10/100/1000M

RJ45 ports and 4*1/10G SFP+ fiber ports. Built-in 60W power supply.

Support 1U/19 inch rack installation.

CONTACT US

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