Product Datasheet

26-port Full Gigabit Managed Industrial PoE Fiber Switch

ONV-IPS33026PFM

OVERVIEW

The ONV-IPS33026PFM series is a full gigabit L2+ managed industrial PoE fiber switch independently developed by ONV. It has 24*10/100/1000Base-T RJ45 ports and 4*100/1000Base-X uplink SFP fiber slot ports (including 2 set combo ports). Port 1-24 can support IEEE 802.3af/at PoE standard. single port PoE power up to 30W and the maximum PoE output power of the host is 400W(at-600W). As a PoE power supply device, it can automatically detect and recognize 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, web camera, VoIP phone, industrial sensor, 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, shopping malls, scenic spots, hospitals, banks, and small and medium-sized enterprises.

+86 755 33376606
Optical Network Video Technologies (Shenzhen) Co., Ltd.

The ONV-IPS33026PFM has the L2+ network management function, support IPV4/IPV6 management, static route full line-rate forwarding, security protection mechanism, ACL/QoS policy and rich VLAN functions, and is easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS(<20ms) to improve link backup and network reliability. When the 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 PoE power management, port traffic control, VLAN division, and SNMP through the Web network management mode.
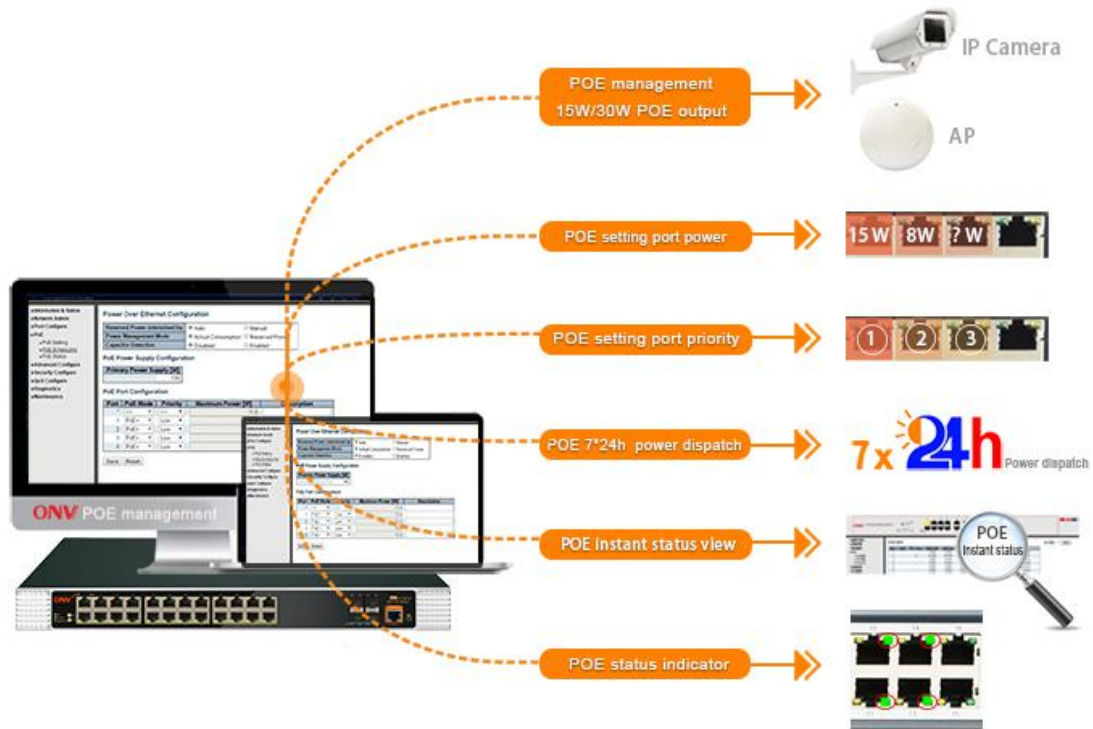
FEATURE

■ **Gigabit access, Gigabit SFP uplink**

◇ A combination of Gigabit Ethernet port and Gigabit SFP port to meet the networking requirements 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**

◇ 24*10/100/1000Base-T RJ45 ports can support POE power supply to meet the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.

◇ IEEE 802.3af/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.

POE management
15W/30W POE output

IP Camera

AP

POE setting port power

15 W 8W ? W

POE setting port priority

① ② ③

POE 7*24h power dispatch

7x 24h Power dispatch

POE instant status view

POE Instant status

POE status indicator

ONV POE management

■ **Security**

◇ 802.1X authentication.

◇ Port isolation,Storm control.

◇ IP-MAC-VLAN-Port binding.

IGMP Snooping

AAA

SSL

ARP Snooping

Secure Management

DHCP Snooping

IP+MAC+ Port+VLAN binding

Port isolation Storm suppression
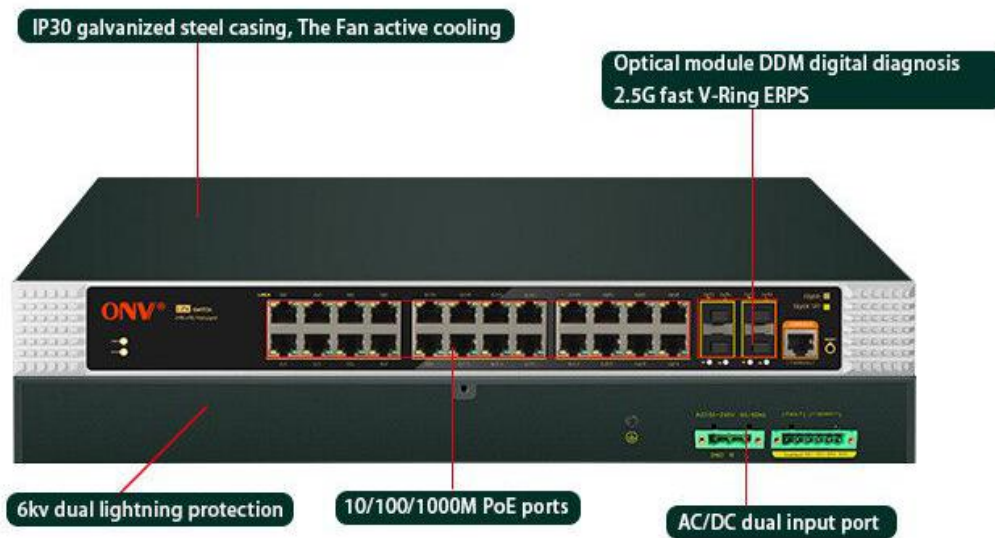
■ **Strong business processing capability**

◇ 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.
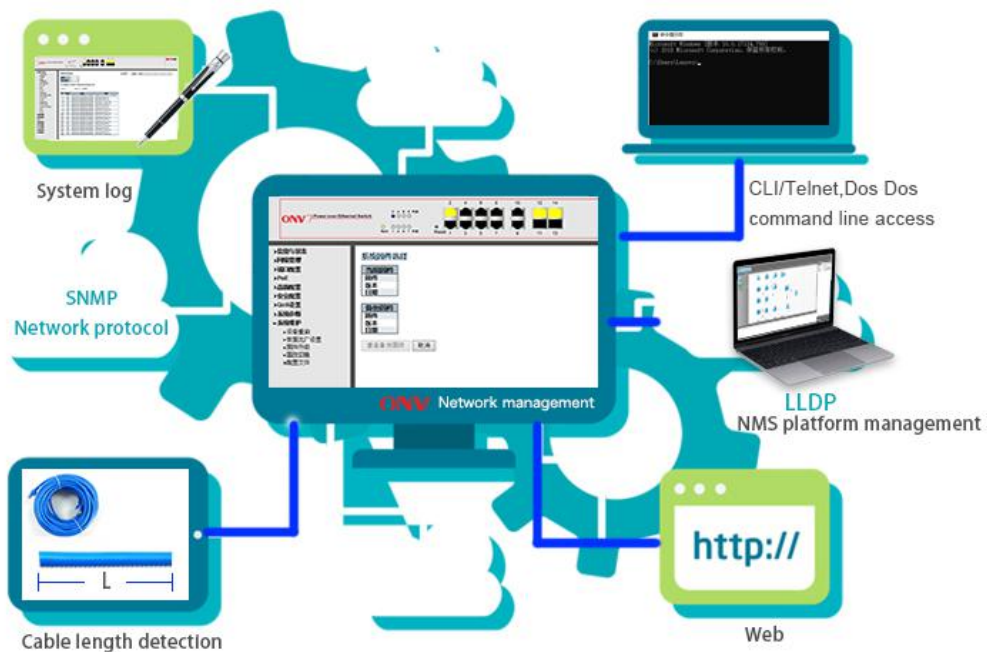
◇ ERPS/STP/RSTP/MSTP.

◇ Static and dynamic aggregation.
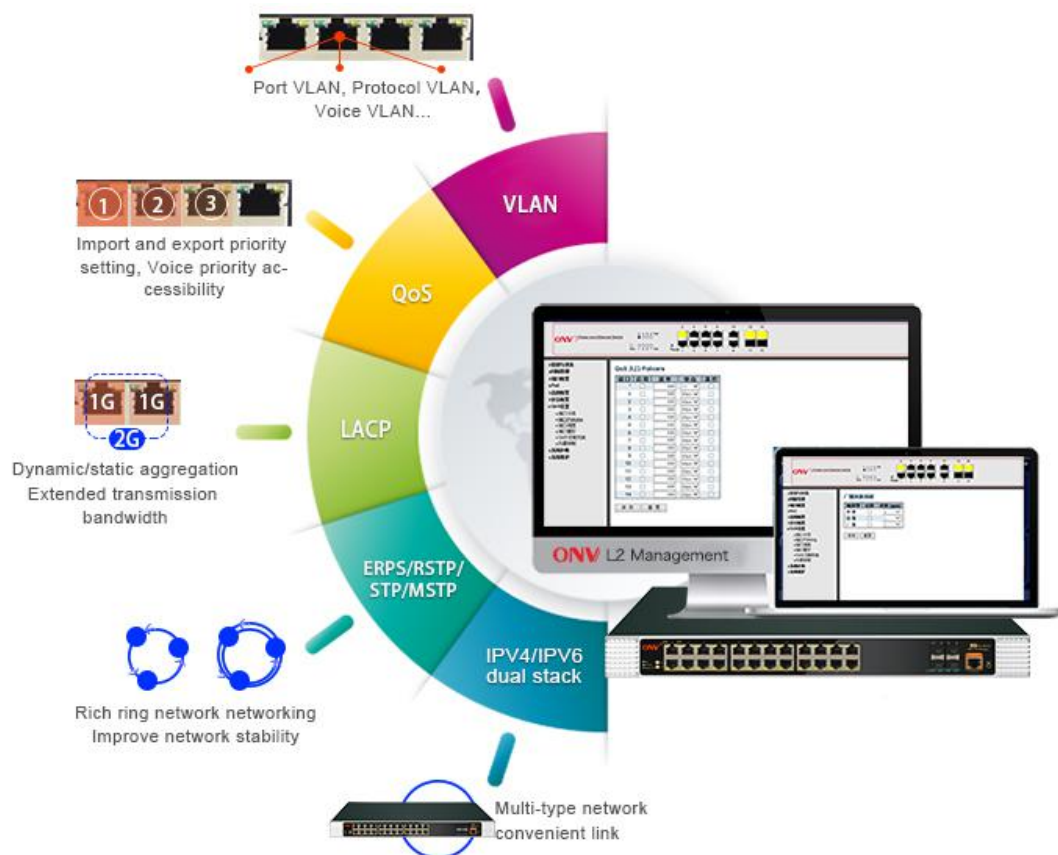
■ **Stable and reliable**

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

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

◇ CCC,CE, FCC, RoHS.

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

IP30 galvanized steel casing, The Fan active cooling

Optical module DDM digital diagnosis
2.5G fast V-Ring ERPS

6kv dual lightning protection

10/100/1000M PoE ports

AC/DC dual input port

■ **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.

System log

SNMP
Network protocol

Cable length detection

ONV Network management

CLI/Telnet,Dos Dos
command line access

LLDP
NMS platform management

http://

Web

+86 755 33376606 ONV
Optical Network Video Technologies (Shenzhen) Co., Ltd.

TECHNICAL SPECIFICATION

Model	ONV-IPS33026PFM	ONV-IPS33026PFM-at
Interface Characteristics		
Fixed Port	24*10/100/1000Base-T POE ports (Data /Power); 4*100/1000Base-X uplink SFP ports (including 2 set combo ports) (Data) 1*RS232 Console 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)	
Optical Fiber Port	Gigabit 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 ~ 550M, single mode: 1310nm / 0 ~ 40M, 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 IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	256Gbps (Non-blocking)	
Forwarding	38.69Mpps	

|		
Rate@64byte		
MAC	8K	
Buffer Memory	8M	
Jumbo Frame	9.6K	
LED Indicator	Power : PWR(yellow), system: SYS(yellow), Network:10/100M Link (yellow) 1000M speed (green), SFP fiber port :L/A (green), POE : PoE (green),	
Reset Switch	Yes, support one key to restore factory settings	
PoE & Power		
PoE Port	Port 1 to 24	
PoE Management	PoE working status Delay start of power supply PoE output priority configuration Scheduling of PoE operation and time Total power limit of PoE power supply PoE output power allocation, off& af &at	
Power Supply Pin	Default: 1/2 (+), 3/6 (-)	
Max Power Per Port	30W, IEEE802.3af/at	
Total PWR / Input Voltage	400W (AC100-240V)	600W (AC100-240V)
Power Consumption	Standby<18W, Full Load<380W	Standby<22W, Full Load<600W
Power Input Interface	Dual input power interface design, AC power supply priority, support anti-reverse protection, power-off automatic switching DC connection; 2 sets of DC12-48V input interface; 1-way alarm switch interface; 1 set of AC power input interface	
Heat Dissipation	Low noise fan active cooling	
Power Supply	Built-in power supply, AC100~240V 50-60Hz 5A	Built-in power supply, AC100~240V 50-60Hz 6.6A

Physical Parameter		
Operation TEMP / Humidity	-40~+80°C;5%~90% RH Non condensing	
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing	
Dimension (L*W*H)	440*298*44.5mm	
Net /Gross Weight	<4.5kg / <5.0kg	<4.6kg / <5.3kg
Installation	Desktop type ,19 inch 1U cabinet installation	
Certification & Warranty		
Lightning protection / protection level	Lightning protection: 6KV 8/20us; Protection level: IP30 IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge IEC61000-4-3(RS):10V/m(80~1000MHz) IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz) IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s IEC61000-4-9(pulsed magnet field):1000A/m IEC61000-4-10(damped oscillation):30A/m 1MHz IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV IEC61000-4-16(common-mode transmission):30V; 300V,1s FCC Part 15/CISPR22(EN55022):Class A IEC61000-6-2(Common Industrial Standard)	
Mechanical Properties	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)	
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS	
Warranty	5 years , lifelong maintenance.	

+86 755 33376606 ONV
Optical Network Video Technologies (Shenzhen) Co., Ltd.

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.
Layer 3 Features	L2+ network management ,IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs
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 13 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 250 Ring at most, Max 1024 devices per ring.
Multicast	MLD Snooping v1/v2,Multicast VLAN IGMP Snooping v1/v2, Max 250 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

298mm

44.5mm

440mm

A   B   C   D   E

F
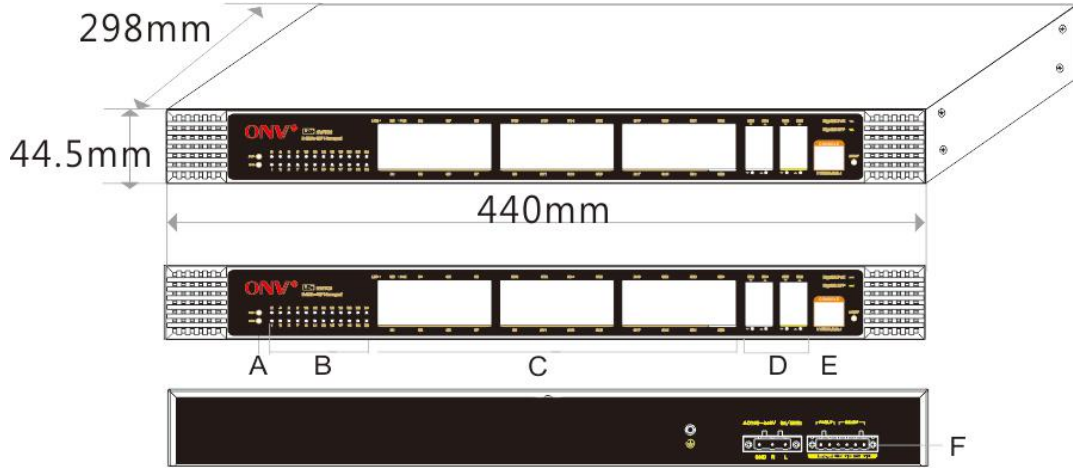
A. Working indicator   B. PoE working indicator
C. 24* PoE ports   D. 4*Gigabit SFP ports
E. Console port   F. AC/DC dual input port

APPLICATION

ORDERING INFORMATION

Model	Description
ONV-IPS33026PFM	L2+ managed industrial PoE fiber switch with 24* 10/100/1000M RJ45 ports and 4*100/1000M uplink SFP fiber slot ports (including 2 set combo ports). Port 1-24 can support IEEE 802.3af/at PoE standard, Built-in 400W power supply.
ONV-IPS33026PFM-at	L2+ managed industrial PoE fiber switch with 24* 10/100/1000M RJ45 ports and 4*100/1000M uplink SFP fiber slot ports (including 2 set combo ports). Port 1-24 can support IEEE 802.3af/at PoE standard, Built-in 600W power supply.
Note: Industrial PoE switch does not match the SFP module.	

PACKING LIST

	CONTENT	QTY	UNIT
PACKING LIST	26-port full gigabit managed industrial PoE 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

+86 755 33376606
Optical Network Video Technologies (Shenzhen) Co., Ltd. ONV

OPTICAL MODULE INFORMATION

Product	Model	Description	Unit
1.25G Fiber 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
	2612-T-G	Industrial 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-G	Industrial 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	PC

14		hot plug and pull.	
	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

OPTICAL NETWORK VIDEO TECHNOLOGIES (SHENZHEN) CO., LTD

Tel: 0086-755-33376606

Fax: 0086-755-33376608

Email: onv@onv.com.cn

Website: www.onvcom.com

Zip: 518000

Headquarter Address: Room 1003, Block D, Terra Building, Futian District, Shenzhen, China

Factory Address: The 4-6th Floor, No. 59, HuaNing Road, Xinwei Community, Dalang Street, Longhua District, Shenzhen, China

14

+86 755 33376606
Optical Network Video Technologies (Shenzhen) Co., Ltd.