



52-port Full Gigabit Managed Ethernet Switch VT-G48CSE

Overview

The VT-G48CSE is a full gigabit L2+ managed Ethernet fiber switch independently developed by ONV. It has 48*10/100/1000Base-T RJ45 ports and 4*100/1000Base-X SFP fiber slot ports. Each port can support wire-speed forwarding.

The VT-G48CSE has L2+ network management function, supports IPV4 management and static routing and forwarding, complete security protection mechanism, perfect ACL/QoS strategy and rich VLAN function, easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP (<50ms) to improve link backup and network reliability. When a one-way network fails, communication can be quickly restored to ensure uninterrupted communication for important transmissions. The switch supports flexible operation and maintenance management, and can be configured through various application services such as Web, CLI, SNMP, Telnet and other network management methods, port flow control, VLAN division, QoS and other functions. It can meet the multi-channel video surveillance and wireless coverage network application environment. Suitable for hotels, campuses, parks, supermarkets, scenic spots, factory dormitories and SMB small and medium-sized enterprises to form a cost-effective network.

High Performance

- L2+ Managed Switch
- Gigabit access
- STP/RSTP/MSTP
- Support IEEE 802.1Q VLAN
- Protocol VLAN
- GMP V1/V2 and IGMP Snooping

Security

- 802.1X authentication
- Port isolation, Storm control
- IP-MAC-VLAN-Port binding

Certification

- Lightning protection: 4KV 8/20us
- Protection level: IP30
- CCC ; CE mark
- CE/LVD EN60950
- FCC Part 15 Class B
- RoHS



FCC



CE



ROHS

52-port Full Gigabit Managed Ethernet Switch

VT-G48CSE

Gigabit access, Gigabit SFP fiber port uplink

- Support Gigabit Ethernet port and Gigabit SFP 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.

Security

- 802.1X authentication
- Port isolation, Storm control
- IP-MAC-VLAN-Port binding

Strong business processing capability

- Support IEEE 802.1Q VLAN, protocol VLAN, users can flexibly divide VLAN according to their needs.
- 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.

Stable and reliable

- CCC, CE, FCC, RoHS.
- Low power consumption, galvanized steel casing, no 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

- 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.

Specifications

Model	VT-G48CSE
Fixed Port	48*10/100/1000Base-T RJ45 ports (Data) 4*100/1000Base-X uplink SFP slot ports (Data) 1*RS232 console port(115200,N,8,1)
Ethernet Port	Port 1-48 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	1/10G SFP+ optical fiber interface, default not include optical modules (optional single-mode / multi-mode, single fiber / dual fiber optical module. LC)
Optical Cable/Distance	Multi-mode: 850nm/0~500M(1.25G), 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, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	368Gbps (non-blocking)
Forwarding Rate@64byte	77.38Mpps
CPU	750MHz
DRAM	1G

MAC	16K
Buffer Memory	12M
Jumbo Frame	10K
FLASH	256M
LED Indicator	Power: PWR (yellow), system:SYS (yellow); network:Link (yellow); PoE: PoE (green); Fiber port : L/A (green)
Reset Switch	Yes, support one key to restore factory settings
Power Supply	
Total PWR / Input Voltage	60W/ (AC100-240V)
Power Consumption	Standby<35W, Full load<55W
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~+75°C, 5%~95% RH Non condensing
Dimension (L*W*H)	440*290*44.5mm
Net /Gross Weight	<4.4kg / <5.0kg
Installation	Desktop type ,19 inch 1U cabinet installation
Certification & Warranty	
Lightning Protection	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN60950, FCC Part 15 Class B, RoHS
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	<p>IPv4 static route/default route, maximum 128 entries</p> <p>L2+ network management, ARP protocol, maximum 1024 entries</p>
VLAN	<p>VLAN based on the protocol, 4K VLAN based on port, IEEE802.1q</p> <p>VLAN based on MAC, Port configuration of Access, Trunk, Hybrid</p>
Port Aggregation	<p>LACP, Static aggregation</p> <p>Max 26 aggregation groups and 8 ports per group</p>
Spanning Tree	<p>STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)</p>
Multicast	<p>MLD Snooping v1/v2, Multicast VLAN</p> <p>IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out</p>
Port Mirroring	<p>Bidirectional data mirroring based on port</p>
QoS	<p>Flow-based Rate Limiting</p> <p>Flow-based Packet Filtering</p> <p>8*Output queues of each port</p> <p>802.1p/DSCP priority mapping</p> <p>Diff-Serv QoS, Priority Mark/Remark</p> <p>Queue Scheduling Algorithm (SP, WRR, SP+WRR)</p>
ACL	<p>Port-based Issuing ACL, ACL based on port and VLAN</p> <p>L2 to L4 packet filtering, matching first 80 bytes message.</p> <p>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.</p>
Security	<p>IP-MAC-VLAN-Port binding</p> <p>ARP inspection, Anti-DoS attack</p> <p>AAA & RADIUS, MAC learning limit</p> <p>Mac black holes, IP source protection</p> <p>IEEE802.1X & MAC address authentication</p> <p>Broadcast storm control, Backup for host datum</p> <p>SSH 2.0, SSL, Port isolation, ARP message speed limit User</p> <p>hierarchical management and password protectio</p>

DHCP	DHCP Client,DHCP Snooping,DHCP Server,DHCP Relay
Management	<p>One-key recovery</p> <p>Cable Diagnose,LLDP</p> <p>Web Management (HTTPS)</p> <p>NTP,System work log,Ping Test</p> <p>CPU instant utilization status view</p> <p>Console/AUX Modem/Telnet/SSH2.0 CLI</p> <p>Download & Management on FTP, TFTP, Xmodem, SFTP,SNMP</p> <p>V1/V2C/V3</p> <p>ONV NMS - smart network management system platform(LLDP+SNMP)</p>
System	<p>Category 5 Ethernet network cable</p> <p>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;</p> <p>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network</p>

OPTICAL MODULE INFORMATION

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
2632	SFP optical module, 1.25G, single-mode dual fiber 1310nm, transmission distance: 20km, LC interface Support DDM function, support hot plug and pull
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
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.
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.
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.
Power Module	
2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.
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.
7832	SFP+ optical module,10G Single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.
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.
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.