## CHSW-3248G-TF4



The CHSW-3248G-TF4 series is a 10G uplink managed Ethernet fiber switch independently developed by our company. It has 48\*10/100/1000Base-T RJ45 ports and 4\*1/10G SFP+ fiber slot ports. Each port can support wire-speed forwarding.

The CHSW-3248G-TF4 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.



### **Applications**





### **Key Features**

- Full Gigabit access, 10G SFP+ fiber port uplink
- o 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.
- o Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.

#### Strong business processing capability

- o IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN and QinQ configuration.
- o QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including Equ, SP, WRR & SP+WRR.
- o ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- o IGMP V1/V2 and IGMP Snooping.
- o ERPS/STP/RSTP/MSTP.
- Static and dynamic aggregation.

#### Security

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

### • Stable and reliable

- o Low power consumption, galvanized steel casing, The fan active cooling.
- o Self-developed power supply, high redundancy design, providing a long term and stable power output.
- o CCC, CE, FCC, RoHS.
- o The user-friendly panel, it can show the device status through the LED indicator of PWR, SYS,
- o Low power consumption, galvanized steel casing, The fan active cooling.

#### • Easy operation and maintenance management

- o Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
- o HTTPS, SSLV3, and SSHV1/V2.
- o RMON, system log, LLDP, and port traffic statistics.
- o CPU monitoring, memory monitoring, Ping test, and cable diagnose



Interface Characteristics		
Fixed Port	48*10/100/1000Base-T RJ45 ports (Data) 4*1/10G	
	RJ45 ports (Data)	
	1*Console RS232 port (115200, N,8,1)	
Ethernet Port	Port 1-48 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	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/	Multi-mode: 850nm / 0 ~ 500M(1.25G), 0-300M / (10G),	
Distance	single mode: 1310nm / 0 ~ 40KM, 1550nm / 0 ~ 120KM.	
Chip Parameter		
Network Management Type	L2+	
ivianagement Type		
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	131Mpps		
Rate@64byte			
MAC	32K		
Buffer Memory	32M		
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	60W/AC100-240V)		
Voltage			
Power Consumption	Standby<35W, Full Load<55W		
Power Supply	Built-in power supply, AC 100~240V 50-60Hz 1.0A		
Physical Parameter	Physical Parameter		
Operation TEMP /	-20~+55°C;5%~90% RH Non-condensing		
Humidity			
Storage TEMP /	-40~+75°C;5%~95% RH Non-condensing		
Humidity			
Dimension (L*W*H)	440*290*44.5mm		
Net /Gross Weight	<4.4kg / <5.0kg		
Installation	Desktop, wall mounted,19-inch 1U cabinet installation		
Certification & Warranty			
Lightning protection /	Lightning protection: 4KV 8/20us; Protection level: IP30		
protection level			





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.	
	L2+ network management,	
	IPV4/IPV6 management	
Layer 3 Features	L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs	
	VLAN based on MAC	
VLAN	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 26 aggregation groups and 8 ports per group.	
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)	
Industrial Ring	G.8032 (ERPS), Recovery time less than 20ms	
Network Protocol	255 Ring at most, Max 1024 devices per ring.	



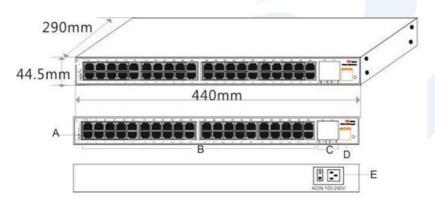


Multicast	MLD Snooping v1/v2, Multicast VLAN
	IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Rate Limiting Flow-based
	Packet Filtering 8*Output queues of
	each port 802.1p/DSCP priority
	mapping
	Diff-Serv QoS, Priority 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 source protection
	IEEE802.1X & MAC address authentication Broadcast
	storm control, Backup for host datum
	SSH 2.0, SSL, Port isolation 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
	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

### **Dimensions**



A. Working indicator

B. 48\*10/100/1000M RJ45 ports

C. 4\*1/10G SPF+ ports

D. Console port

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



# **Ordering information**

Model	Description
CHSW-3248G-TF4	L2+ managed Ethernet aggregation /core fiber switch with 48* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports, Built-in 60W power supply.  Support 1U/19-inch rack installation.
CHSW-3212G-TF4	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.
CHSW-3224G-TF4	L2+ managed Ethernet aggregation 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.
CHSW-3224GSFP-4GT-TF4	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.