cudy

48-Port L3 Managed Gigabit Switch
with Four 10G SFP Slots

Model: **GS**5048S4

Datasheet

Features

- Support IEEE 802.1d, IEEE 802.1w, IEEE 802.1s, IEEE 802.1p, IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3ae standards ;

- L3 management, support DHCP Server, QoS, ACL, SNMP V1/V2/V3, IGMP Snooping v1/v2 ;

- Support STP/RSTP/MSTP (ERPS), Support loop detection and self-healing, support remote loopback monitoring and control (802.3ah OAM); Support IPV4/IPV6,RIP,OSPF

- Support multiple VLAN division, MAC VLAN, Protocol VLAN, Private VLAN;

- Support IP address + MAC address + VLAN+Port binding, DHCP Snooping, support IP source and DAI protection;

- Surge Protection: General 4KV, Differential 2KV, ESD 8KV air, 6KV contact

Technical parameters

Model	GS5048S4
AC INPUT	AC INPUT (100-240V)
Ethernet Port	48 * 10/100/1000 Mbps RJ45 Port
	4 * 10G SFP+ Port
	1 * RJ45 Console Port
	1 * USB Port
Bandwidth	176 Gbps
Packet Forwarding rate	131 Mpps
DDR SDRAM	512 MB
Flash Memory	32 MB
Packet Buffer Memory	16 Mbit
MAC Address	32 K
Jumbo frame	12 Kbytes
VLANs	4096

Standard

Network Protocols	IEEE 802.3 : Ethernet MAC Protocol
	IEEE 802.3i : 10BASE-T Ethernet
	IEEE 802.3u : 100BASE-TX Fast Ethernet
	IEEE 802.3ab : 1000BASE-T Gigabit Ethernet
	IEEE 802.3z : 1000BASE-X Gigabit Ethernet (optical fiber)
	IEEE 802.3ae : 10G Ethernet (optical fiber)
	IEEE 802.3az : Energy Efficient Ethernet
	IEEE 802.3ad : Standard method for performing link aggregation
	IEEE 802.3x : Flow control
	IEEE 802.1ab : LLDP/LLDP-MED (Link Layer Discovery Protocol)
	IEEE 802.1p : LAN Layer QoS/CoS Protocol Traffic Prioritization
	(Multicast filtering function)
	IEEE 802.1q : VLAN Bridge Operation
	IEEE 802.1x : Client/Server Access Control and Authentication
	Protocol
	IEEE 802.1d : STP
	IEEE 802.1s : MSTP
	IEEE 802.1w : RSTP

Industry Standard	EMI: FCC Part 15 CISPR (EN55032) class A
	EMS: EN61000-4-2 (ESD), EN61000-4-4 (EFT),
	EN61000-4-5 (Surge)
Network Media	10BASE-T: Cat3、4、5 or above UTP (≤100 M)
	100BASE-TX: Cat5 or above UTP (≤100 M)
	1000BASE-TX: Cat5 or above UTP (≤100 M)
	Multi-mode Fiber: 50/125、62.5/125、100/140 um
	Single-mode Fiber: 8/125、8.7/125、9/125、10/125 um

Environmental standards

Working Environment	Operating temperature: -10~50°C
	Storage temperature: -40~70°C
	Operating Humidity: 10%~90%, No condensation
	Storage Humidity: 5%~90%, No condensation

Function indication

Indicator Light	PWR (Power indicator),
	SYS (System lights),
	Link/ACT (Link light/data light)

Physical specifications

Product Information	Product Dimensions: 440*280*44 mm
	Package Dimensions: 500*365*85 mm
	Product N.W: 3.87 KG
	Product G.W: 4.70 KG
Packing Information	Carton Dimensions: 520*445*385 mm
	Packing Qantity: 5 pcs
Voltage	Input Voltage: AC 100-240 V/50-60 Hz

Software function

Basic function	Support hardware watchdog, factory reset, system and port LED
	Support global information, statistical information, log information
	Support User management, alarm management, configuration management
	Support Port rate, duplex, flow control, maximum frame length configuration
	Support Port mirroring, port speed limit, port energy saving
Layer 3 Interface	Support Layer 3 interface
	Support IPv4, IPv6 address configuration
	Support ARP configuration
	Support ND configuration
Layer 3 Routing	Support IPv4 static routing
	Support IPv6 static routing
	Support RIP V1/V2
	Support OSPF
DHCP	Support DHCP server
	Support DHCP relay
	Support DHCP Snooping

VLAN	Support 4K VLAN
	Support 802.1Q VLAN，baesd on port VLAN
	SupportAccess、Trunk、Hybrid VLAN mode
	Support GVRP (VLAN registration protocol)
	Support MAC VLAN 、IP VLAN
	Support Voice VLAN
MAC Address	Support MAC address automatic learning and aging
	Support Static, dynamic, filtered address table
Security features	Password protection
	Support Restrict user access based on port number, IP address, MAC address
	Support HTTPS、SSH V1/V2
	Support IP-MAC-PORT-VLAN binding
	Support ARP detection, IP source protection, DoS protection
	Support DHCP Snooping、DHCP Attack protection
	Support 802.1X Certification
	SupportAAA (Authentication, Authorization, Accounting), Support RADIUS protocal,TACACS+
	Support Port security, port isolation

Access control	Support L2(Layer 2)～L4(Layer 4) Packet filtering function
	Support Port mirroring, flow rate limiting, QoS remarking
QOS	Support 8 port queues
	Support Port priority, 802.1P priority, DSCP priority
	Support SP, WRR Priority scheduling algorithm
Spanning tree	Support STP(IEEE 802.1d), RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) protocal
	Support Multi-instance, Support Aggregate interface
	Support BPDU protection
Multicast	Support IGMP v1/v2/v3 Snooping
	Support MLD v1/v2 Snooping
	Support Layer 2 multicast fast leave mechanism, querier
	Support Layer 2 IPv4 static multicast
	Support Layer 2 IPv6 static multicast
	Support IGMP v1/v2/v3 Layer 3 multicast
Storm suppression	Support multicast suppression
	Support broadcast storm suppression
	Support unknown unicast suppression
Ring protection	Support Ring protection

Link Aggregation	Support Static Aggregation
	Support LACP Dynamic Aggregation
	Support based on IP, MAC, mixed load-balancing modes
	Maximum support 32 aggregation groups (8 ports per aggregation group)
IPv6	Support IPv6 Ping、IPv6 Traceroute、IPv6 Telnet
	Support IPv6 SSH
	Support IPv6 HTTP 、IPv6 HTTPS
Management and Maintenance	Support WEB Management (HTTP、HTTPS)
	Support CLI (Telnet, SSH V1/V2, Local serial port)
	Support SNMP V1/V2/V3
	Support RMON V2
	Support LLDP Device discovery
	Support SNTP Time synchronization
	Support CPU Monitoring, Memory Monitoring
	Support System log, classification warning
	Support Ping, Traceroute detection, cable detection