L3 Managed 48 ports 10G Ethernet Switch

Description

G-SW-M48+7 Network Switch is layer 3 with 48 ports 10Gbps which is developed for small and medium enterprises' core network and for medium network's Convergence Layer's applications. It is based on ASIC integration technology that provides non-blocking wire-speed IP switching solution.

G-SW-M48+7 can connect the 10Gbps networks for the server and large data end users, and it can also construct the main networks for it can use the fiber to supply long-distance transmission.

Features

- **High Performance Gigabit Switches**
  Provides 48 1/2.5/5/10G BASE-T SFP+ ports
- **Link aggregation**
  Up to 32 aggregation groups, each supporting 8 ports
- **Layer 3 function**
  Support static and dynamic routing base on ASIC chipset
  Support RIP V1, V2, OSPF
- **Service Classification**
  Up to 8 queues on each port
- **Non-blocking Switching**
  Up to 960Gbps port switch capacity and 714.24Mpps L2/L3 forwarding capability
- **Security Implementation Capacity**
  Up to 4096 802.1Q VLAN
  Support static routing and dynamic routing protocol
  Support IP and MAC address table locking and static setting
  Support private VLAN
  Support L2 to L7 packets filter and content-based packet identification
- **Jumbo frame**
  Up to 12K bytes jumbo frame
- **DHCP**
  Support DHCP Server and DHCP Relay
- **Multicast**
  Support IGMP v1 v2 v3 and IGMP Snooping protocol
  Support PIM-SM multicast routing protocol
- **ARP security features**
  Support manual IP and MAC binding

  Support automatic binding base of address range

  Support ARP locking

- **ACL features**
  Support Port-base ACL filtering
  Support standard ACL and extension ACL
- **Multi-loop protection**
  Support STP, RSTP, MSTP (Recovery time less than 50ms)
  Support VRRP (Virtual Router Redundancy Protocol)
  Support EAPS (Recovery time less than 30ms)
- **Manageability**
  Support CLI, Telnet, SNMP, WEB

Built-in SNMP agents such as Bridge MIB, MIBII, Entity MIB v2, RMON MIB, Proprietary MIB

Specifications

Attributes	
Networking Interfaces	48 x 1/2.5/5/10G BASE-T SFP+ ports
Management Interface	Console
LED Indicators	Power, Link/Act
Performance	
Switching Capacity	960 Gbps
Forwarding Capacity	714.24 Mpps
Forwarding Mode	Store and Forward
Packet Buffer Memory	72 Mbit
RAM for CPU	2G Mbit
Flash Memory	256 Mbit
MAC Address Table	128K
Max. Jumbo Frame size	12KB
VLAN Quantity	4K
ACL Table	512
L3 Interface	512
Port Queues	8
Physical	
Dimensions	440 x 200 x 44 mm
Weight	
Operating Temperature	0 to 40℃
Storage Temperature	-10 to 70℃
Operating Humidity	5 to 95% Noncondensing
Power Method	100-240VAC, 50/60Hz
Max. Power Consumption	30W
EMC Safety	FCC, CE, RoHS
Reliability	
Port Configuration	
Enable and Disable	Support control enable and disable
Auto-Negotiation	Support force port mode and speed
Flow Control	Support IEEE802.3x full-duplex Support half-duplex backpressure

Storm Control	Support broadcast, multicast and DLF package rate limit
Port Mirroring	Support many to one mirroring
Rate Limit	Support Port input and output rate limit
Link Aggregation	Support manual Link Aggregation Support LACP Up to 32 maximum aggregation groups, each containing up to 8 ports
Aggregation Strategy	Source MAC / Destination MAC / Source Destination MAC Source IP / Destination IP / Source Destination IP
Port Protection	Each port can be configured into isolated protected port from each other

MAC Configuration

MAC Address Table Management	Support
Transfer Mode	Support IVL transfer mode
Static MAC Address	Support
MAC Binding	Support
MAC Address Filter	Support
MAC Quantity Limitation	Support limit the number of MAC-addresses Learning per port

VLAN Configuration

VLAN Based on 802.1Q	Support
MAC-Based VLAN	Support
IP-Based VLAN	Support
Protocol-Based VLAN	Support
Guest VLAN	Support
Private VLAN	Support

Reliability Protocol

Spanning Tree	Support STP/RSTP/MSTP
BPDU Guard	Support
BPDU Filter	Support
Port Loop Detection	Support
EAPS Protocol	Support RFC3619

IP Routing

Static ARP	Support
Default Routing	Support
Static Routing	Support
VLSM	Support Variable Length Subnet Mask

CIDR	Support for classless inter-domain routing
RIP	Support Routing Information Protocol v1/v2
OSPF	Support Open Shortest Path First v2/v3
VRRP	Support Virtual Router Redundancy Protocol v3
PBR	Support Policy-based routing
DHCP relay at Layer3	Relay of DHCP traffic across IP domains

Multicast

IGMP	Support v1/v2/v3
IGMP SNOOPING	Support
IGMP Group Limit on Interface	Support
Multicast groups	256
Static Multicast MAC Address	Support
Multicast source port suppression	Support
PIM-SM	Support

Access Control List (ACL)

Based on Standard IP	Support
Based on Extend IP	Support
Based on MAC IP	Support
Based on MAC ARP	Support
Based on time	Support
Port Filtering	Support

Quality of Service (QOS)

Scheduling Mode	Support WRR, SP, WFQ
Sorting Based on Port	Support
Sorting Based on 802.1p	Support
Sorting Based on DSCP (DiffServ)	Support

Security

Administrative Security	Support start and end TELNET, WEB and SNMP serve Support TELNET, WEB and SNMP serve binding with Standard IP ACL Support control the number of user for TELNET
CPU Protect	Switch self-security protect, forbid flow attack
IP-MAC Address Binding	Support binding between static configuration IP, MAC and Port
AAA	Support 802.1x protocol Support RADIUS protocol Support RADIUS server authentication authorization and bill Support MAC-based 802.1X authentication. Support 802.1x guest VLAN

Prevent ARP Spoofing	Support manual configure ACL rule based on MAC ARP prevent ARP spoofing
Management Feature	
CLI Management	Support serial port management Support TELNET management Support SSH management
WEB Management	Support
SNMP Management	Support SNMP protocol Support SNMP TRAP Support standard and private MIB
User management	Support multi-user management
Show CPU Utilization	Support
Show RAM Utilization	Support
Log Management	Support
Configuration Download / Upload	Support
Upgrade Firmware	Support
Timer Management	Support local timer management Support SNTP protocol get clock
Debugging Tools	
PING	Support
TRACEROUTE	Support
TELNET Client	Support
Package List	
Ethernet Switch	1pcs
User Manual	1pcs
Power Cord	1pcs
DB9 to RJ45 Cable	1pcs
Rack Mount Kit	2pcs
Rubber Feet	4pcs

Order Information

Switch Models	
G-SW-M48+7	48 x 10GE SFP+ L3 Ethernet Switch

SFP Modules	
G-OM-SFP-GE	10G SFP module, RJ45 port
G-OM-MMDFLC+	10G SFP module, multi-mode, 500M, 850nm, LC
G-OM-SMDFLC+20Km	10G SFP module, single-mode, 20km, 1310nm , LC
G-OM-SMDFLC+40Km	10G SFP module, single-mode, 40km, 1310nm, LC
G-OM-SMDFLC+80Km	10G SFP module, single-mode, 80km, 1550nm, LC