6 x10G SFP+ 48GE L3 Managed Switch

GNT-G4806M6



6x 10Gbps SFP+ slots.

48 10/100/1000Mbps RJ45 ports.

Support IEEE 802.1Q VLAN, QoS, ACL, SSL.

Support Spanning Tree, Multicast IPV6, SNMP.

Support 802.1X certification.

Support ERPS ring network.

Support RSTP/MSTP spanning tree.

Supports Port Security, Port Monitoring, and Port Isolation.

Support Quaternary binding, ARP/IP/DoS protection.

Product Description

GNT-G4806M6 from GENATA is a L3 managed switch equipped with 48 Gigabit RJ45 ports and 4*10G SFP+ slots.

With abundant L3 management features supported, the GNT-G4806M6 is capable of delivering high throughput to even the most demanding edge-of-network workgroups, while in small networks it can act as a backbone for Gigabit switches and high-speed servers. 4 SFP+ slots provide greater network flexibility.

The GNT-G4806M6 is designed exclusively for the networking needs of growing businesses, with an extensive suite of management and security features available. These devices are cost-effective for small and medium-sized businesses, providing ideal solutions for a variety of network scenarios.

Features

Supports IEEE 802.3i, 802.3u, 802.3ab, 802.3z, 802.3x , 802.3az.

Provides 48 10/100/1000Mbps RJ45 ports, and 6x 10G SFP+ slots.

Supports MAC address auto-learning and auto-aging.

Store and forward mode operation.

LED indicators for monitoring power, link/activity.

Supports QoS, port mirroring, link aggregation protocol.

19 inches full metal iron shell and internal power adapter design, suitable for rack installation.

※Specifications subject to change without notice

Energy saving and low noise

Following the IEEE 802.3az (Energy Efficient Ethernet) standard, it greatly reduces the power consumption of the equipment and is green and energy-saving.

Fully considering the low noise requirements of the user environment, the fan-less design is adopted to monitor the temperature in the system in real time, which can effectively reduce noise pollution.

Strong business process capability

With IEEE 802.1Q VLAN support, the VLANs can be flexibly partitioned according to your needs.

Supports voice VLAN, configure QoS parameters for voice data streams, enhance the transmission priority of voice data streams, and ensure call quality.

Supports QoS, three priority modes based on Endpoint, 802.1P and DSCP, and four queue scheduling algorithms: Equ, SP, WRR and SP+WRR.

Supports ACL, according to configure matching rules, processing actions, and temporal permissions to filter packets, and provide flexible security access control policies.

Supports IGMP V1/V2 multicast protocol and IGMP Snooping for multi-terminal HD video surveillance and video conference access.

Supports multicast VLAN and multicast filtering for efficient data transmission, saving network bandwidth and reducing network load.

Supports port monitoring by copying a copy of the monitored port's packets to the monitoring port to enable network monitoring.

Complete security protection mechanism

Supports quadruple binding of IP address, MAC address, VLAN, and port to filter packets.

It supports ARP protection against ARP spoofing and ARP flooding attacks, such as grid spoofing and intermediary attacks, which are common in local area networks.

Supports IP source protection to prevent illegal address spoofing including MAC spoofing, IP spoofing, and MAC/IP spoofing.

Supports 802.1X authentication, which provides authentication for local grid computers and controls the authorization status of the controlled endpoints based on the authentication results.

Supports port security and stops learning when the maximum number of MAC addresses is reached to prevent MAC address attacks and control the flow of the port network.

Diverse reliability protection

Supports STP/RSTP/MSTP spanning tree protocols, eliminating layer 2 loops and enabling link backup.

Supports spanning tree security to prevent all forms of malicious attacks on devices in the spanning tree network.

Static and dynamic aggregation are supported to effectively increase link bandwidth, achieve load balancing, link backup, and improve link reliability.

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Easy operation and maintenance

It supports a variety of management and maintenance methods such as Web-based management, CLI commands (Console, Telnet), and SNMP (V1/V2/V3).

Supports HTTPS, SSL V3, TLSV1, SSHV1/V2 encryption for more secure management.

RMON, system logs, and end-to-end traffic statistics for network optimization and transformation.

Supports cable detection, Ping detection, and Tracert detection to easily analyze the faulty network nodes.

LLDP is supported to facilitate the network management system to query and judge the communication status of the link.

Supports CPU monitoring, memory monitoring, Ping detection, and Tracert detection.

Hardware Features

GNT-G4806M6	
Ports	48 x 10/100/1000Mbps ports, 6 x 10000Mbps SFP+ slots,1x Console port
Power Supply	AC100~240V 50/60Hz
Protocol Standard	IEEE 802.3,802.3i,802.3u,802.3ab,802.3x, 802.3z, 802.3az
Indicator light	Electrical port indicator, SFP fiber port indicator, power input indicator, system running indicator
Network medium	10Base-T: UTP category 3, 4, 5 cable (maximum 100m) 100Base-Tx: UTP category 5, 5e cable (maximum 100m) 1000Base-T: UTP category 5e, 6 cable (maximum 100m) 1000Base-X: MMF, SMF
Dimensions	440*290*44.5 mm
Forwarding mechanism	Store-and-Forward
Switching Capacity	216Gbps
Forwarding Rate	160.704 Mpps
MAC Address Table	32K
Cache	12Mbit
Jumbo Frame	10KBytes
Environment	Operating Temperature: 0℃ ~45℃ (0℉~113℉) Storage Temperature: -40℃ ~70℃ (-40℉ ~158℉) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~95% non-condensing

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Software Features

L3 Switching Features	• Static Routing - IPv4/IPv6
	• Address Resolution Protocol (ARP) - Static ARP
L3 Switching Features	• 8K MAC Address Table
	• 10K (10000) Jumbo Frame
	• Flow Control - 802.3x (Full-duplex) - Back-Pressure (Half-duplex)
	• Spanning Tree - IEEE 802.1D (STP) - IEEE 802.1w (RSTP) - IEEE 802.1s (MSTP)/16 instances - Auto Edge Port - BPDU Filtering - ERPS
	• Link Aggregation - IEEE 802.3ad LACP - Static Trunk - Max 8 Group - Max 8 Ports/Group - Traffic Load Balancing
VLAN	• Surveillance VLAN - 16 OUI Mode (Auto/Manual)
	• Voice VLAN - 16 OUI Mode (Auto/Manual)
	• QinQ (IEEE 802.1ad) - Basic
	• GARP VLAN Registration Protocol (GVRP)
	• 4096 Static VLAN
	• 8 groups Protocol-based
	• 256 MAC-based
	• IEEE 802.1Q Tagged-based

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Multicast	• Common - 256 Multicast Groups - Immediate Leave - Static/Forbidden Router Port - Static/Forbidden Forward Port - 128 profiles Filtering - Throttling
	• IGMP Snooping - IGMP v1/v2 - IGMP v3 Basic (BISS) - IGMP v2/v3 Querier
	• MLD Snooping - MLD v1/v2
	• Multicast VLAN Registration (MVR) - IPv4
Quality of Service (QoS)	• Trusted QoS
	• Queue Scheduling - WRR - WFQ - Strict Priority - Hybrid(WRR+SP or WFQ+SP)
	• Class of Service - Port-based - 802.1p - IP TOS Precedence - IP DSCP
	• Rate Limit - Port-based (Ingress/Egress)
Access Control List (ACL)	• ACL Type - L2/L3/L4 - 512 MAC -based - 512 IPv4-based - 512 IPv6-based

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	• Access Rules - 1024
Security	• AAA Authentication
	• 8 TACACS+
	• 8 RADIUS
	• Authentication Manager - IEEE 802.1X - MAC Auth - Web Auth - Guest VLAN - Port-based - Host-based
	• Account Manager - Local Authentication - 8 Multiple User Account - Multi-Level Security (Manager/Operator) - Password Recovery Procedures
	• Management Access - Management VLAN - 256Management ACL
	• SSL - SSLv2 - SSLv3 - TLSv1
	• WebUI - HTTPS
	• CLI - SSH v1/v2
	• Port Security - 256 Dynamic Lock
	• Storm Control - Broadcast - Unknown Multicast - Unknown Unicast
	• Spanning Tree

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	- BPDU Guard
	• Protected Port (Port Isolation)
	• Black Hole MAC
	• CPU Defense Engine
	• DoS Prevention
	• DHCP Snooping (with Option 82)
	• Dynamic ARP Inspection
	• 256 IP Source Guard
	• IP/MAC/Port Binding (IMPB)
	• Dynamic VLAN Assignment
IPv6	• IPv6 Host - Auto Configuration - Static IPv6 Address and Prefix Length - Static IPv6 Default Gateway - IPv6 Neighbor Discovery (ND) - IPv6 Duplicate Address Detection - ICMPv6
	• IPv6 Application - HTTP/HTTPS - TELNET - SSH - SNMP - TFTP - Syslog - PING - DHCPv6
	• CLI - 3 sessions Console - 3 sessions Telnet (RFC854)
	• WebUI - HTTPS
	• SNMP(v1,v2c,v3)
	• File Management - Firmware Upgrade/Backup - Dual Images

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Management	- Configuration Download/Backup - Multiple Configurations
	• Upload/Download - TFTP (RFC783) - HTTP - UART
	• Time Management - Local - SNTP
	• Port Management - Friendly Port Name (Port Description) - Error Disabled Recovery
	• Line Management - Console - Telnet (RFC854) - SSH v1/v2
	• DHCP - Client
	• DNS - Client
	• Software Reset Button
	• IEEE (802.3az)
	• 32 entries / type RMON Management
Discovery	• IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
	• ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
Diagnostics	• UDLD
	• Mirroring - 4 sessions port-based (Many to One)
	• Syslog (RFC3164) - Local RAM - Local Flash - 8 Remote Server
	• System Diagnostics - CPU Utilization - Memory Utilization

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	- Port Utilization - Technical Support Log
	• Port Diagnostics - Cable Test - Fiber Module Status
	• Network Diagnostics - Ping Test - Traceroute
MIB	• RFC1213 MIBII (System & Interface groups)
	• RFC2819 RMON I (1,2,3, & 9 groups)
	• RFC1215 Generic Traps
	• RFC1493 Bridge
	• RFC2674 Bridge MIB Extensions
	• RFC2737 Entity
	• RFC3635 Ethernet-Like
	• RFC2863 Interface Group
	• SNMP-Community-MIB
	• SNMPv3-MIB