



## Feature Benefits

Hardware Features	Benefits
IEEE 802.3af/802.3at Standard PoE	The GGS2404 Series PoE switches all support IEEE 802.3af & 802.3at for your VoIP, surveillance, and Wi-Fi APs.
Integrated 4 Gigabit SFP+ Uplinks	The GGS2404-28 switches support 4 integrated Gigabit SFP ports. Besides providing more uplink bandwidth, the SFP ports can be used for redundant links.
Console Port	The GGS2404 Series includes a console port. All switches support multiple management access through CLI/SNMP/Web/Telnet.
Diag LED	The GGS2404 Series includes a Diag LED to help check the switch status. When the switch boots, it runs a self-check. When the LED is on green, it means the switch operating status is normal.
Software Features	Benefits
Dual Firmware/Configuration	The GGS2404 Series can save dual firmware/configuration file to provide redundancy and more security for users.
Static Routing	The GGS2404 supports L3 static routing to group different network segments and increase user flexibility.
Dynamic VLAN Assignment PoE	Dynamic VLAN Assignment automatically assigns the same port to different VLANs to increase user convenience.
Timer	The PoE Timer can define a PoE power schedule for different customer applications. This saves money and reduces unnecessary waste.
IGMP and MLD Snooping	IGMP/MLD snooping manages multicast streams to ensure high-quality, smooth video.
802.3az and Green-Ethernet	The GGS2404 Series supports the new IEEE 802.3az and Green Ethernet. Using the Energy Efficient Ethernet standard, the switch automatically decreases power usage when network traffic is low.
Multi Network Management	The GGS2404 Series supports CLI, Web, SNMP v1/v2c/v3, and Telnet management to provide multiple network management access. The switch supports a private MIB for detailed information.
Enhanced Security	The GGS2404 Series supports multiple security features, such as ACLs, storm control, 802.1X, port security, MAC filters, IP source guard, and AAA.
Comprehensive QoS	The GGS2404 Series supports 8 hardware queues, port-based QoS (IPv4/IPv6 DSCP), and DiffServ features to provide optimal real-time services.
DDOS Protection	The GGS2404 Series provides DDOS protection to avoid hacker attacks on your network.
Cable Diagnostics	Cable diagnostics check real-time cable status to find network problems immediately.
Auto Voice/Surveillance VLANs	The GGS2404 Series supports automatic voice and surveillance VLANs, providing VoIP and IP cameras the optimum network traffic usage.
Dashboard	The GGS2404 Series provides a fantastic feature called "Dashboard". It provides the several useful current switch status, like CPU, Memory utilization and Event & traffic status and so on. With those useful information, users could quickly overview and maintain the switch status.

## Key Features

### Performance and Scalability

The GGS2404 Series is a range of web-smart switches designed for the SMB market. The switches can be deployed in different target network topologies, from small to large. Besides powerful software features, the switches provide a complete solution from 1G, both non-PoE and PoE options.

The GGS-2404-28P Series offers complete PoE solutions managed PoE switch design, a cost-effective PoE switch with powerful software and security features. The switch can be mounted many small spaces, on a wall or in a rack.

### Continuous Availability

IEEE 802.1w Rapid Spanning Tree Protocol provides a loop-free network and redundant links to the core network with rapid convergence, which ensures a faster recovery from failed links, enhancing overall network stability and reliability. IEEE 802.1Q VLAN-segmented broadcast domains reduce broadcast traffic and increase LAN security and performance. IEEE 802.3ad Link Aggregation Control Protocol (LACP) increases bandwidth by automatically aggregating several physical links together as a logical trunk and provides load balancing and fault tolerance for uplink connections.

### Multi Management

The GGS2404 Series supports CLI, Web, SNMP v1/v2c/v3, and Telnet management to provide multiple network management access. The switch supports a private MIB for detailed information.

This new Gigalite switch also supports management functions through both IPv4 and IPv6.

### Comprehensive QoS

Eight egress queues per port enables differentiated management of up to eight traffic types.

Traffic is prioritized according to 802.1p or DSCP, giving optimal performance to real-time applications such as voice and video.

Asymmetric bidirectional rate-limiting, per port or per traffic class, preserves network bandwidth and allows maximum control of network resources.

### Enhanced Security

Port Security allows access to a switch port based on MAC address. This limits the total number of devices from using a switch port and protects from MAC flooding attacks. IEEE 802.1X port-based access control ensures all users are authorized before being granted access to the network. User authentication is carried out using a standards-based RADIUS server.

Access Control Lists (ACLs) restrict access to sensitive network resources by denying packets based on source and destination MAC addresses, IP addresses, and TCP/UDP ports. ACLs are hardware supported, so switching performance is not compromised.

Secure Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypts Telnet and web access to the switch, providing secure network management.

IP Source Guard can be enabled with DHCP snooping on trunk ports with a large number of VLANs to filter and control IP traffic access to the network.

DHCP snooping provides security by filtering un-trusted DHCP messages and by building and maintaining a DHCP snooping binding table.

Dynamic VLAN assignment for user authentication and location-independent access to the network.

### Smart Network Deployment

Automatic Voice VLAN for quick deployment of VoIP, and automatic Video VLAN to help deploy your IP-based surveillance system. Static routing helps you set simple routes for control of your network resources. IGMP and MLD snooping provide better multicast services.

### PoE Support

The GGS-2404-28P provide up to 30 Watts of power to attached devices, such as VoIP phones, wireless access points, and surveillance cameras, all over existing Ethernet cables. The switch can deliver up to 30 Watts on 2/4/6/12 ports, or 15.4 Watts on 4/8/12/24 ports.

Limited Lifetime

**WARRANTY**

**Warranty:** All Giga-Lite products are supported under a Limited Lifetime Advance Replacement Product Warranty of up to 2 years from being made End of Life (until Giga-Lite stops production of that model). The warranty period is effective on the date of the purchase from its authorized Distributors or re-seller. Proof of purchase showing Model and serial number are required to receive warranty service. The Warranty policy shall be to repair or replace the hardware at no cost.

## GGG-2804-28T Series Product Specifications

Product Model		GGG-2404-28T	GGG-2404-28P
<b>Product Image</b>			
<b>Port</b>	RJ-45 10/100/1000 Ports	24	24
	SFP or SFP+ Uplink Ports	4 (1G)	4 (1G)
	PoE Ports	X	24
	Console Port	1	1
<b>Performance</b>	Switching Capacity	56 Gbps	56 Gbps
	Forwarding Rate	41.7 Mpps	41.7 Mpps
	Flash Memory	32 MB	32 MB
	DRAM	256 MB	256 MB
	Packet Buffer	4.1 Mbits	12 Mbits
	MAC Address Table	8 K	16 K
	Jumbo Frames	10 K	10 K
	MTBF	563,826 hrs	681,017 hrs
	Heat Dissipation	68.242 (Btu/H)	887.141 (Btu/H)
	Acoustic Noise	0 dB (A)	N/A
<b>Power Supply</b>	100-240 VAC, 50-60 Hz	O	O
	Max System Power Consumption (Watts)	X	260 W
<b>PoE</b>	IEEE 802.3af/802.3at	X	O
	PoE Power Budget	X	200 W
	PoE Timer	X	O
<b>Mechanical</b>	Rack Space	19"	19"
	Form Factor	Rackmount	Rackmount
	Dimension (W x D x H)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)	44 x 22 x 4.4 cm (17.3 x 8.6 x 1.7 in)
	Weight	TBD	2.8 kg (6.18 lb)
<b>Environmental</b>	Operating Temperature	0°C to 50°C	0°C to 50°C
	Storage Temperature	-40°C to 70°C	-40°C to 70°C
	Altitude	3000 m	3000 m
	Operating Humidity (non-condensing)	10% to 90%	10% to 90%
	Storage Humidity (non-condensing)	10% to 90%	10% to 90%
	WEEE	O	O
	RoHS	O	O

## Features

### L2 Features

Spanning Tree Protocol:  
 IEEE 802.1D Spanning Tree Protocol (STP)  
 IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)  
 IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP)  
 Loopback Detection  
 BDPU Filter/Guard  
 BDPU Forward  
 Root Guard  
 VLANs:  
 Supports 4K IEEE 802.1Q VLANs  
 Port-Based/MAC-Based/Protocol-Based VLANs  
 Guest VLAN  
 Auto Voice VLAN  
 Auto Surveillance VLAN\*  
 Link Aggregation:  
 Static Trunk  
 IEEE 802.3ad Link Aggregation Control Protocol (LACP)  
 IGMP Snooping:  
 IGMP v1/v2/v3 snooping  
 IGMP Filtering/Throttling  
 IGMP Queries  
 IGMP Immediate leave  
 MLD Snooping  
 LLDP/LLDP-MED  
 Green-Saving  
 IEEE 802.3az  
 Cable Length  
 No Link Power-Saving  
 Jumbo Frame packet  
 Cable Diagnostic

### L3 Features

Static Routing\*

### QoS Features

Rate Limiting  
 Priority Queues Schedule (WRR/Strict Priority/Hybrid QoS)  
 Port-Based QoS  
 IPv4/IPv6 DSCP  
 DiffServ  
 Auto VOIP  
 Auto Video  
 8 HW Queues per port  
 Dynamic QoS

### IPv6

IPv4/IPv6 Dual Protocol Stack  
 IPv6 Management  
 IPv6 Ping/Trace  
 IPv6 Telnet  
 IPv6 Syslog  
 IPv6 TFTP  
 HTTP over IPv6  
 SNMP over IPv6

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### PoE

Support IEEE 802.3af (15.4 W)/IEEE802.3at (30W) on each port  
 (Total PoE Power Budget as follows):

GGs2404-28P (200 W)

### Security

DDOS Protection  
 CPU Guard (CPU Protection)  
 Port Isolation  
 Port Mirror (One to One, One to Many)  
 Remote Mirror  
 Storm Control  
 Broadcast/Multicast/Unknown Storm Control  
 IEEE 802.1X  
 ACL  
 Ingress Only  
 L2/L3/L4  
 ACL entry: 512  
 IPv4/IPv6  
 TCP/UDP-Based, MAC-Based ACL  
 Port Security  
 MAC Filter  
 MAC Authentication  
 Port max count per port  
 Dynamic VLAN Assignment  
 Dynamic ARP Inspection  
 AAA (RADIUS/TACACS+)  
 IP Source Guard  
 SSH v1.5/v2.0  
 SSL v1/v2/v3  
 SSL IPv4/IPv6  
 SFlow\*  
 (10T/P/PE/28T/28P/28PP Trace on port (Ingress only)  
 (52T/26T trace multi port)

### Management

System password protection  
 NTP/SNTP  
 Dual Image/Configuration  
 Configuration upload/download (HTTP/TFTP/FTP)  
 Firmware upload/download (HTTP/TFTP/FTP)  
 Auto Firmware Upgrade  
 RMON (groups 1,2,3 and 9)  
 SNMP  
 SNMP Trap  
 SNMP v1/v2/v3  
 SNMP Standard/Private MIB  
 Management Access (Console/SNMP/Web /Telnet )  
 Memory Flash Log  
 Event/Error Log/Syslog  
 DHCP v4/v6 Client//DHCP Snooping  
 DHCP Snooping Option82  
 Dynamic Provision (via Option 66,67)  
 DHCP Relay v4 (v6\*)  
 Port Mirroring (One to One) TX/RX (both)  
 DNS Client without DNS proxy

**PRODUCT INFORMATION**

<b>Part Number</b>	<b>Product Description</b>
GGs-2404-28T	Giga-lite Web-Smart Pro Switches 24 Port Non POE Switch with 4 SFP
GGs-2404-28P	Giga-lite Web-Smart Pro Switches 24 Port POE Switch with 4 SFP
GT-4201-SX	Giga-lite Transever 1Gbps, Small Form Factor Pluggable (Distance: 500 m; Wavelength: 850nm)
GT-4201-LX	Giga-lite Transever 1Gbps, Small Form Factor Pluggable (Distance: 10 km; Wavelength: 1310 nm)
GT-4201-LHX	Giga-lite Transever 1Gbps, Small Form Factor Pluggable (Distance: 40 km; Wavelength: 1310 nm)
GT-4201-ZX	Giga-lite Transever 1Gbps, Small Form Factor Pluggable (Distance: 80 km; Wavelength: 1550 nm)
GT-4202-SX	Giga-lite Transever 1Gbps, Small Form Factor Pluggable (Distance: 500 m; Wavelength: 850 nm, DDM)
GT-4202-LX	Giga-lite Transever 1Gbps, Small Form Factor Pluggable (Distance: 10 km; Wavelength: 1310nm, DDM)
GL-120500000027A	Giga-lite Console Cable

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