

24-Port 10G SFP+ and 2-Port 100G QSFP28 L3 Managed Switch



Product Highlights

- Support 24*10Gbps SFP+ Ports+ 2*100Gbps QSFP28 ports
- 100G/40Gbps ports (support 25G/10Gbps module splitting rates)
- 1*Console port, 1*ETH port, 1*USB port
- Operating Temperature: 0~45°C
- Support Cut-Through forwarding mode with fixed transmission delay
- Support complete L2/L3 features



Hardware Features

Description	Specification
Model	TGM2404QS-AT
Interface	24*10Gbps SFP+ ports 2*100Gbps QSFP28 ports 1*Console port, 1*ETH port 1*USB port
Port Standard	IEEE802.3 (Ethernet) IEEE 802.3ae (10G Ethernet) IEEE 802.3ba (40/100G Ethernet) IEEE802.3x (Flow Control) IEEE 802.3az (Energy Efficient Ethernet) IEEE 802.3ad (link Aggregation) IEEE 802.1AB LLDP/LLDP-MED (Link Layer Discovery Protocol) IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.1Q (Virtual VLAN) IEEE 802.1p (VLAN Label) IEEE 802.1X (User authentication)
Switching Bandwidth	880Gbps
Packet Forwarding Rate	478Mpps
Memory	2GB
Flash Memory	8GB
Packet Buffer	9Mbit
MAC Address Table	98K
Jumbo Frame	9216Kbytes
VLAN	4K VLAN
Transmission Method	Store and Forward
Power Supply	AC 100-240V 50/60Hz DC 12V12.5A
Mainboard Power Consumption	30.67W
Surge Protection	Port Surge: Common mode 4KV, Differential mode 2KV(Class A) Electrostatic ESD: Air 8KV, Contact 6KV(Class C)



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Description	Specification
Structure Information	Product Dimensions: 440*280*44mm Packaging Dimensions: 500*385*85mm Product Net Weight: 3.83KG Product Gross Weight: 4.38KG
Packing Information	Carton Dimensions: 520*190*385mm Packing Quantity: 2PCS Packing Weight: 9.72KG
Package Contents	Switch 1pcs, Power Cord 1pcs, Manual 1pcs, Certificate of Inspection 1pcs, Rack-mounted kit 1 pair, Network cable 1pcs
Fan Quantity	4
Installation	Desktop, Rack-mounting
Certification	CE, FCC, ROHS
Operating Temperature	0~45°C
Storage Temperature	-40~70°C
Operation Humidity	10%~90%, <u>non-condensing</u>
Storage Humidity	0%~95%, <u>non-condensing</u>
ID Green LED	On: ID indication on Off: ID indication off
ETH	Green LED on: 1Gbps Link normal Yellow LED on: 10/100Mbps Link normal Off: Link blocked Flashing: Data transmitting
PWR Green LED	On: Powered on Off: Powered off
SYS	Green LED on: The system is starting up or running normally Yellow LED on: System abnormal alarm or other errors Off: The system is not powered on or running abnormally



Description	Specification
Ports 1-24	Green LED on: 10Gbps Link normal Yellow LED on: 1Gbps Link normal Off: Link blocked Flashing: Data transmitting
Ports 25~26	Green LED on: 100Gbps Link normal Yellow LED on: 40G Link normal Off: Link blocked Flashing: Data transmitting
Breakout	Loop flashing: Data transmission

Software Features

Description	Specification
L3 Function	
IPv4	IPv4 VLAN Interface IPv4 Static Routes IPv4 Black Hole Routing Static routing and IP SLA linkage uRPF ARP Gratuitous ARP ARP Proxy
IPv6	IPv6 VLAN Interface IPv6 Static Routes IPv6 Black Hole Routing ICMP V6 IPv6 ND
RIP	V2 Router-ID
OSPF	Authentication V2
ECMP	SLB DLB RR
NAT	Support
VRRP	V2 Track for VRRP V2



Description	Specification
L2 Function	
Port	Port Switch
	Port Description
	Port Speed
	Port Duplex
	Port Flow Control
	Support 10G/1G
	Support 40G/100G
	Jumbo, Up to 9800 bytes
	Fiber Module (DDM)
	2.5G Electrical Port
Link Aggregation	Support load balance policy; Base on MAC and IP-MAC
	SLB
	DLB
	RR
	Static and Dynamic Group
	Support LACP
Storm Control	Up to 16 groups
	Broadcast
	Unknown Multicast
	Unknown Unicast
	Based on Port
Port Mirroring	Based on Flow
	Use CPU as mirror source
	Use CPU as mirror destination
	One to one monitor
	Many to one monitor
	Ingress/Egress/Both
	<u>Up to 4 session groups</u>



Description	Specification
Port Security	MAC Address Constraints
	Port Security MAC Address
	Protect/Restrict/Shutdown
Port Isolation	L2 Traffic Isolation
	ALL Traffic Isolation
Loopback Detection	Boardcast
VLAN	Access / Trunk
	Congurable VID from 1 - <u>4094</u> ;Max. 4K static VLAN groups
	MAC VLAN
	Protocol VLAN
	IP VLAN
	Private VLAN
	VLAN Statistics
	Basic QinQ VLAN
	Flexible QinQ
	VLAN mapping
MAC Address	Dynamic Address
	Static Address
	Filtering Address
	MAC drift check
Spanning Tree Protocol	STP/RSTP/MSTP
	BPDU Filter
	BPDU Guard
	Root Guard
	Loop Guard
	Edge Port
	Anti TC-BPDU attack
LLDP	LLDP
	LLDP MED



Description	Specification
Multicast	IGMP Snooping
	IGMP V1/V2/V3
	Router Port
	Static IGMP group address
QoS	Querier
	Strict Priority and WDRR
	Congestion avoidance: TD (Tail Drop) / WRED
	802.1P Priority
	IP DSCP Priority
	Flow classification by ACL
	Traffic Redirect
	Traffic Mirroring
	Traffic shaping: Queue / Port
	Traffic statistics
Support up to 8 queues per port	
Priority Remarking	
ERPS	Dynamic Address
G8032	STP/RSTP/MSTP
L2 Protocol Transparent	CDP/CFM/DOT1X/SLOW-PROTOMTP
	LLDP/STP
Services	
DHCP	DHCP Server
	IP Pool
	Static Binding
	DHCP Relay
	Option 43
Access Protocol	HTTP
	HTTPS
	Telnet
	SSH
	RPC-API
	Manager ACL
	Session Timeout
	Password Retry Count
Silent Time	



Description	Specification
Security	
AAA	Authentication
	Authorization
	Accounting
	RADIUS
	TACACS+
	802.1X
	Base on port/MAC/local
DHCP Snooping	Global/VLAN
	Option 82
IP Source Guard	Circuit ID
	Support
Dynamic ARP Inspection	Support
Prevent DDOS attack	Support
Control Plane Policy (COPP)	Support
ACL	MAC ACL
	IPv4 ACL
	IPv6 ACL
	Time Range
	Basic Mode ACL
	Port-group ACL
	Telnet/SSH ACL filtering
Telnet/SSH IPv6 ACL filtering	
Diagnostics	
Syslog	Logging Message
	Remote Server
SFLOW	Support
IPSLA	Support
IPFIX	Support
Ping	Support
Traceroute	Support
UDLD	Support



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Description	Specification
MLAG	IGMP Snooping
ETH OAM	Hardware level OCM detection
Management	
Manager Access	Console
	METH
	HTTP/HTTPS
	Telnet
	SSHv2
	SNMP
Manager IP	Static Address
	DHCP Client
	Support IPv4 and IPv6 address
	DNS
Time Synchronization	NTP
	Manual Time
	Time Zone
SNMP	V1/V2CV3
	Community
	V3 User
	Group
SNMP MIB	Trap Host
	RFC 1213 MIB-II
	RFC 1493 Bridge MIB
	RFC 1643 Ethernet MIB
	RFC 2819 RMON MIB (Groups 1, 2, 3 and 9)
	RFC 2863 Interface MIB
	LLDP
Private MIB	
RMON	Statistics
	History
	Event
	Alarm
User	Account
	Level

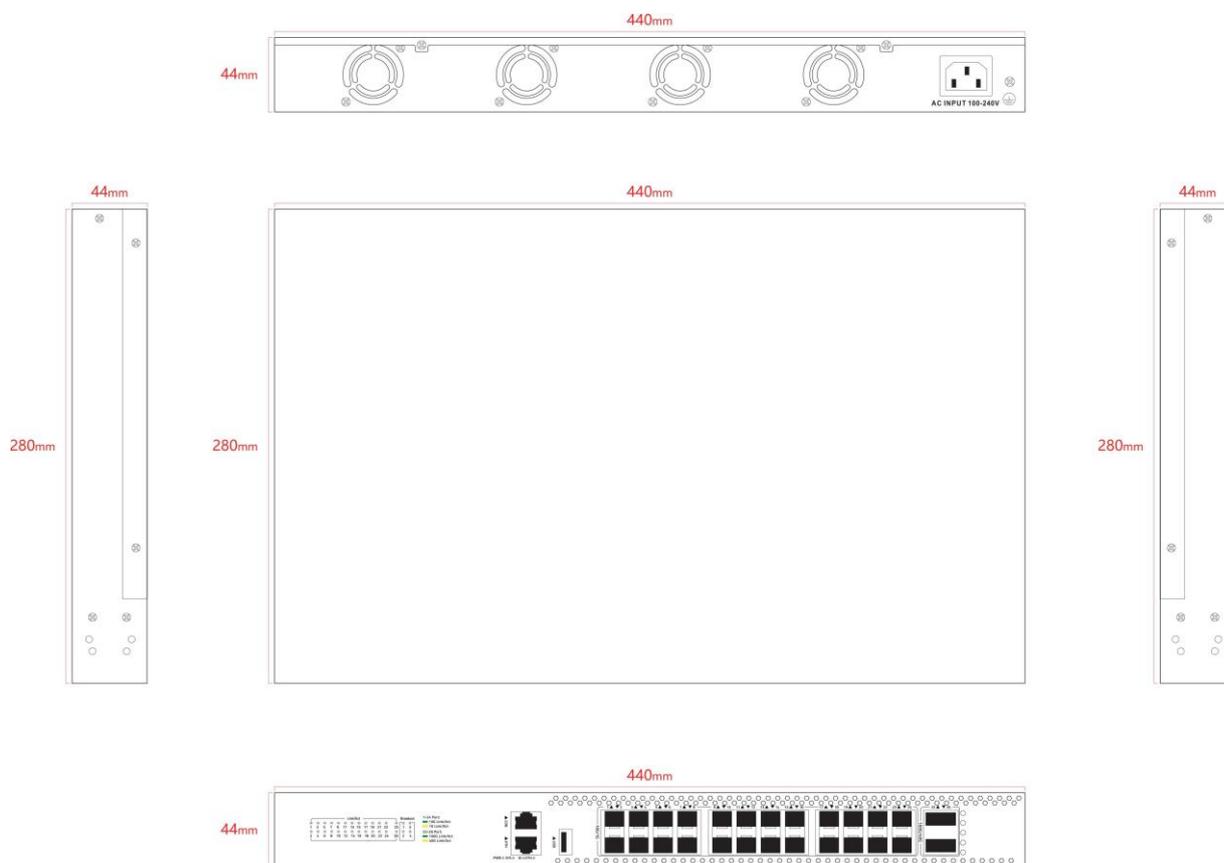


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Description	Specification
Firmware	Double Image; Swap between Active and Alternate firmware image. Firmware Upgrade
Configuration	Upload and download Upload and download via USB interface
File System	File System TFTP FTP SCP xmodem
Banner	Support
Save	Support
Restart	Support
Factory Defaults	Support
Standards Compliance	V1/V2/V3
	IEEE 802.3x flow control and back pressure
	IEEE 802.3ad port trunk with LACP
	IEEE 802.1D Spanning Tree Protocol
	IEEE 802.1w Rapid Spanning Tree Protocol
	IEEE 802.1s Multiple Spanning Tree Protocol
	IEEE 802.1p Class of Service
	IEEE 802.1Q VLAN tagging
	IEEE 802.1x Port Authentication Network Control
	IEEE 802.1ab LLDP
	RFC 768 UDP
	RFC 793 TFTP
	RFC 791 IP
	RFC 792 ICMP
	RFC 959 FTP
	RFC 2068 HTTP
	RFC 1112 IGMP v1
	RFC 2238 IGMP v2
	RFC 3378 IGMP v3
	RFC 2328 OSPF v2
	RFC 2453 RIP v2
	RFC 4443 ICMPv6



Product Structure Diagram



Mounting ear diagram (Standard, support to install on the cabinet)
Unit of size: mm

Rack mounting ears

