

FS2844GTX 10G Managed Fiber Switch, 28p GbE SFP, 4p GbE UTP, 4p 10G



FS2844GTX is the smart access switch for carrier's IP MAN and enterprise networks. Based on the new-generation high-performance hardware, it supports functions such as powerful ACL, flexible QinQ, 1:1 or N:1 VLAN switching, Ethernet OAM, carrier-level QoS and industry-level 10G Ether-ring, ensuring this switch meets application requirements of all kinds among many office sites.

Main Features

*Advanced Hardware Architecture and Industry-Leading Port Intensity

1U box-shaped switch with 28 SFP ports, 4 GE ports and 4 10G SFP+ ports with high-performance ASIC switch chip

*Carrier-class Ethernet Switches

- Supports carrier Ethernet ring network protection protocol. The protection switching time is less than 50ms. It also supports simple and effective redundancy protection mechanism such as STP/RSTP/MSTP protocol and dual uplink standby link protection and LACP link aggregation. These functions meet the requirement of carrier grade high reliability.
- Perfect Ethernet OAM, which can real time monitor the network operating state and rapidly detect and locate the malfunction.
- Supports strong ACL function. The solution supports L2~L7 data access and control based on the physical port, VLAN IDs, source MAC/IP addresses and protocol port, which provides flexible ways of policy control.

- Supports various L2 multicast function, including IGMP-Snooping, user fast-leave mechanism and cross VLAN multicast replication function.

***Carrier QoS Policies**

- Supports complex traffic classification based on VLAN, source MAC/IP addresses, destination MAC/IP addresses, IP protocols, or priorities. It also supports priority remark. These functions provide an effective way for users to optimize their businesses.
- Provides flexible bandwidth control policies and support a port base or flow-based Committed Access Rate (CAR) and guarantees Layer 3 line-speed forwarding.
- Every port supports 8 priority queues.
- Supports multiple queue grooming algorithms such as SP, WRR or SP+WRR.

***Comprehensive IPv6 Solutions**

- Supports IPv6 based Ping, Traceroute, Telnet, SSH, ACL, meeting the need of IPv6 network equipment management and service control.

***Comprehensive Security Mechanisms**

- Advanced hardware architecture design, realizing the hierarchical scheduling and protection of the packet. It provides multiple security measures to defend against DOS or TCP attacks; and supports command line authority control based on user levels.
- Comprehensive Security Certification: Complies with IEEE 802.1x, Radius, BD Tacacs+.
- Supports the suppression of broadcast, multicast and unknown unicast packet, ensuring the equipment can operate normally in harsh network conditions.
- Perfect loop detection mechanism.
- Supports the port isolation in a same VLAN and DHCP-Snooping, IP+MAC+ port binding.

***Convenient Management and Maintenance**

- Supports multiple management styles such as Console, Telnet, SSH
- Supports WEB based management. The management is more simple and effective.
- Supports upload and download of TFTP files.
- Smart SNMP Network Management Software which supports network element auto-discovery, topology management, equipment configuration management, performance data analysis, and fault management. Network management is simplified and the user gets a new product experience.

Hardware Specification

Items	Specifications
Model No.	FS2844GTX
Key Components	VSC7448
Interface	SFP(1G) Port: SFP x 28 Uplink Port: RJ45 (GE)x 4 & SFP+(10G) x 4 MGMT Port: RJ45 x 1 Console Port: RJ45 x1 Button: Reset button x 1
Standard	IEEE 802.3 10Base-T 10Mbit/s Ethernet IEEE 802.3u 100Base-TX, 100Base-FX, Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit/s Ethernet over twisted pair IEEE 802.3z 1000Base-X Gigabit/s Ethernet over Fiber-Optic IEEE 802.1d STP (Spanning Tree Protocol) IEEE 802.1w RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s MSTP (Multiple Spanning Tree Protocol) ITU-T G.8032 /Y.1344 ERPS (Ethernet Ring Protection Switching) IEEE 802.1Q Virtual LANs (VLAN) IEEE 802.1X Port based and MAC based Network Access Control, Authentication IEEE 802.3ad Link aggregation for parallel links with LACP(Link Aggregation Control Protocol) IEEE 802.3x Flow control for Full Duplex IEEE 802.1ad Stacked VLANs, Q-in-Q IEEE 802.1p LAN Layer 2 QoS/CoS Protocol for Traffic Prioritization IEEE 802.1ab Link Layer Discovery Protocol (LLDP) RFC 2328 、 5340 OSPF
LED Indication	Power: Green LED Off : power off or fail On : power on System: Green LED Off: power off or fail On: system is working. Blinking: system booting up SFP LED: Off: port disconnected or link fail Green: 1000 Mbps connected Amber: 10/100Mbps connected Blinking: sending or receiving data RJ45 LED: Off: port disconnected or link fail



	<p>Green: 1000 Mbps connected Amber: 10/100Mbps connected Blinking: sending or receiving data</p> <p>SFP+ LED Off: disconnected or fail Blue: 10Gbps connected Green: 1000Mbps connected Blinking: sending or receiving data</p>
MAC Address Table	32 K
Switching capacity	80Gbps
Forwarding rate	148Mpps
Transmission Method	Store-and-Forward
Reset Button	Reset default
Power Requirement	Internal power supply: 100-240VAC, 50/60Hz
Power Consumption	55W
Dimension	440(W) × 193(D) × 44(H)mm/ 3kgs
Rack Mountable	Support 19" 1U design (Bracket included)
Temperature	-10°C to 50°C
Humidity	Operating : 10%-90% Non-condensing Store : 5%-95% Non-condensing

Software Specification

Items	Specifications
MAC exchange	<p>Static configuration and dynamically learning of MAC address</p> <p>Check and delete MAC address</p> <p>Configuring of MAC address aging time</p> <p>Limit on MAC address learning number</p> <p>MAC address filtering function</p> <p>Black-hole MAC items</p>
VLAN Support	<p>4K VLAN entries</p> <p>GVRP</p> <p>QinQ</p> <p>Private VLAN</p>
STP	<p>802.1D (STP) 802.1W (RSTP) 802.1S (MSTP)</p> <p>BPDU protection, root protection, and loopback protection</p> <p>EAPS</p> <p>ERPS</p>
Multicast	IGMP v1/v2/v3



	<p>IGMP Snooping</p> <p>IGMP Fast Leave</p> <p>Multicast group policy and multicast number limit</p> <p>Multicast traffic cross VLAN duplication</p>
IP Routing	<p>Static route</p> <p>OSPF</p> <p>VRRP</p>
DHCP	<p>DHCP Server</p> <p>DHCP Relay</p> <p>DHCP Client</p> <p>DHCP Snooping</p>
ACL	<p>Layer2/3/4 ACL</p> <p>IPv4、 IPv6 ACL</p> <p>VLAN ACL</p>
QoS	<p>Flow classification based on L2/L3/L4 protocols</p> <p>CAR flow limit</p> <p>802.1P/DSCP priority re-labeling</p> <p>SP, WRR and “SP+WRR”</p> <p>Congestion avoidance mechanisms like Tail-Drop and WRED</p> <p>Flow monitoring and flow shaping</p>
Security	<p>L2/L3/L4 ACL flow identification and filtration</p> <p>DDoS attack prevention, TCP’s SYN Flood attack prevention, UDP Flood attack prevention, etc</p> <p>Broadcast/multicast/unknown unicast storm-control</p> <p>Port isolation</p> <p>Port security, and “IP+MAC+port” binding</p> <p>DHCP snooping and DHCP option 82</p> <p>IEEE 802.1x authentication</p> <p>Radius BDTacacs+ authentication</p> <p>Level-based command line protection</p>
Reliability	<p>Static / LACP aggregation</p> <p>Ethernet OAM</p>
Management	<p>Console, Telnet, SSH2.0</p> <p>Browser-based WEB management</p> <p>SNMP v1/v2/v3</p> <p>TFTP file upload and download</p> <p>RMON</p>



EMI/Safety

Item	Description	Remark
Safety	LVD EN62368:2014	
EMC	FCC Part 15, Subpart B:ANSI C63.4-2014	Class A
	CE EN55032: 2010+AC:2011 EN55024: 2010+A1:2015	