

S2800S Series Switches

GIGABIT SMART MANAGED SWITCHES FOR ESSENTIAL NETWORK NEEDS OF SMB

Models: S2800S-8T2F-P; S2800S-8T; S2800S-24T4F-P; S2800S-24T2F; S2800S-48T4F



Overview

With the growth of virtualization, cloud-based services, and applications such as VoIP, video streaming, and IP surveillance, simple network equipment has been unable to meet the needs of SMBs for network application expansion.

The new S2800S series smart-managed switches achieve a perfect balance between performance and ease of use.

The S2800S switches integrate L2+ functions such as 802.1Q VLAN and port-based VLAN, QoS, IGMP Snooping, LACP link aggregation, Static Routing, Etc., providing more cost-effective options for SMBs.

Benefits

- Layer 2+ Switch
- CLI/WEB UI/Telnet/SSH Management
- Varied QoS Policies
- Complete Security Polices
- Powerful ACL Functions
- Simple and Easy Network Maintenance
- Comply with IEEE 802.3af/at power supply standard

Key Features

Enterprise-Level Features

S2800S supports a complete lineup of L2+ features, including 802.1Q VLAN, port mirroring, STP/RSTP/MSTP, link aggregation control protocol, and 802.3x flow control. Advanced IGMP snooping ensures that the switch intelligently forwards multicast streams only to appropriate subscribers, thereby cutting off unnecessary traffic. At the same time, IGMP throttling and filtering restrict each subscriber at the port level to prevent unauthorized multicasting access. Static routing is a simple way to segment the network and route traffic internally through switches to increase efficiency.

Enhanced QoS

Voice and video traffic can be prioritized based on IP address, MAC address, TCP port number, UDP port number, Etc. With QoS (Quality of Service), voice and video services stay lag-free even when bandwidth is insufficient.

Robust Multicast Control

IGMP snooping prevents the flooding of multicast traffic by dynamically configuring switch ports so that multicast traffic is forwarded to only those associated with an IP multicast receiver. As a result, IGMP increases the performance of networks by reducing multicast traffic flooding.

Reliability and Energy Efficiency

The fanless design of S2800S-8T2F-P, S2800S-8T, and S2800S-24T2F ensures noise-less operation and increases the reliability of the system. The design of the S2800S series switches incorporates high energy efficiency in order to reduce the impact on the environment. In addition, the Green Ethernet power-saving features and fanless design significantly reduce the power consumption.

Network Security

Security features include IP-MAC-Port-VID binding, port security, storm control, and DHCP snooping to defend against a series of network threats. A comprehensive list of common DoS attacks is provided, making it easier than ever to prevent these attacks. In addition, the access control list (ACL, L2 to L4) function restricts access to sensitive network resources by denying data packets based on source and destination MAC addresses, IP addresses, TCP/UDP ports, or VLAN IDs. The user's network access can be controlled through 802.1X authentication, which is used in conjunction with a RADIUS server to grant access only when valid user credentials are provided.

Easy Management and Maintenance

Support many management modes such as the CLI, WEB UI, SNMP. Support FTP, TFTP.

WEB UI management mode is easy and efficient for installing and debugging the device. SNMP smart network management platform. The combination realizes automatic equipment discovery, network topology management, equipment configuration management, performance data statistics and analysis and trouble management.

Technical Specification

S2800S series switches come with advanced hardware architecture design L2+ features. Here's a look at the details.

CHARACTERISTICS

	S2800S-8T2F-P	S2800S-8T	S2800S-24T4F-P	S2800S-24T2F	S2800S-48T4F
Ports					
Ports	8x 10/100/1000 BASE-T RJ45 2x 1G SFP	8x 10/100/1000 BASE-T RJ45 -	24x 10/100/1000 BASE-T RJ45 4x 1G SFP Ports	24x 10/100/1000 BASE-T RJ45 2x 1G SFP Ports	48x 10/100/1000 BASE-T RJ45 4x 1G SFP Ports
Auto MDI/MDIX	YES	YES	YES	YES	YES
Operating System					
OS	FSOS	FSOS	FSOS	FSOS	FSOS
Performance					
Layer Type	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Layer 2+
Switching Capacity	20 Gbps	16 Gbps	56 Gbps	52 Gbps	104 Gbps
Forwarding Rate	14.88 Mpps	11.9 Mpps	41.66 Mpps	38.68 Mpps	77.38 Mpps
Flash Memory	16 MB	16 MB	16 MB	16 MB	16 MB
SDRAM	128 MB	128 MB	128 MB	128 MB	128 MB
Swap Mode	Store-and-Forward	Store-and-Forward	Store-and-Forward	Store-and-Forward	Store-and-Forward
Jumbo Frame	10 K	10 K	10 K	10 K	10 K
MAC address	8 K	8 K	8 K	8 K	8 K
Packet Buffer	4 MB	4 MB	4 MB	4 MB	4 MB
DDM	YES	YES	YES	YES	N/A
Power					
Max. Power Consumption	83 W	12 W	242 W	24 W	36 W
Power Supply	AC100-240V, 50/60Hz	DC12V, 50/60Hz	AC100-240V, 50/60Hz	AC100-240V, 50/60Hz	AC100-240V, 50/60Hz
PoE Standard	IEEE 802.3af/at	-	IEEE 802.3af/at	-	-
PoE Ports	8, up to 30 W	-	24, up to 30 W	-	-

CHARACTERISTICS

	S2800S-8T2F-P	S2800S-8T	S2800S-24T4F-P	S2800S-24T2F	S2800S-48T4F
PoE Power Budget	65 W	-	220 W	-	-
Physical and Environmental					
Fan	Fanless	Fanless	1	Fanless	1
Dimensions (HxWxD)	1.73"x11.02"x7.09" 44*280*180 mm	1.38"x7.48"x4.72" 35*190*120 mm	1.73"x17.32"x12.4" 44*440*315 mm	1.73"x17.32"x8.27" 44*440*210 mm	1.73"x17.32"x8.27" 44*440*210 mm
LEDs	Power, System, Link/Act, 1000M	Power, System, Link/Act, 1000M	Power, System, Link/Act, 1000M	Power, System, Link/Act, 1000M	Power, System, Link/Act, 1000M
Operating Temperature	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)	32°F to 122°F (0°C to 50°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Operating Humidity	0-90% (Non-Condensing)	0-90% (Non-Condensing)	0-90% (Non-Condensing)	0-90% (Non-Condensing)	0-90% (Non-Condensing)

FEATURES

Functionality	Description
Layer 2+ Features	VLANs
	<ul style="list-style-type: none"> • Port-based VLAN
	<ul style="list-style-type: none"> • Access VLAN
	<ul style="list-style-type: none"> • Trunk VLAN
	<ul style="list-style-type: none"> • Hybrid VLAN
	<ul style="list-style-type: none"> • 802.1Q tagged VLAN
	<ul style="list-style-type: none"> • VLAN Number: 256
	<ul style="list-style-type: none"> • VID Number: 1-4K
	<ul style="list-style-type: none"> • Management VLAN
	<ul style="list-style-type: none"> • Voice VLAN
	IGMP
	<ul style="list-style-type: none"> • IGMP v1/v2 Snooping
<ul style="list-style-type: none"> • Support 256 groups 	
<ul style="list-style-type: none"> • IGMP Queries 	
<ul style="list-style-type: none"> • Immediate-Leave 	
<ul style="list-style-type: none"> • MLD Snooping 	
MAC Address Administration	
<ul style="list-style-type: none"> • MAC address display/inquire 	
<ul style="list-style-type: none"> • Static MAC settings 	
<ul style="list-style-type: none"> • Dynamic MAC address administration 	
<ul style="list-style-type: none"> • MAC address filtering 	
Link Aggregation	
<ul style="list-style-type: none"> • Maximum 8 port per group, support 16 group 	
<ul style="list-style-type: none"> • Static Link Aggregation 	
<ul style="list-style-type: none"> • Static Trunk 	

FEATURES

Functionality	Description
<p>Layer 2+ Features</p>	<p>Access Control</p> <ul style="list-style-type: none"> Based on MAC source, destination MAC, MAC source and destination MAC, MAC protocol, source IP access control. Based on the TCP, IP, UDP, IGMP source IP, destination IP, source IP, and destination IP access control. <p>Port Mirroring</p> <ul style="list-style-type: none"> One-to-one Many-to-one By mirroring port transmission, receiving and sending and receiving data.
<p>QoS Features</p>	<p>Rate Limiting</p> <p>Priority Queues Scheduling</p> <p>WRR</p> <p>Strict Priority</p> <p>Port-based QoS (per system)</p> <p>IPv4 DSCP</p> <p>HW Queues (8 queues)</p>
<p>Security</p>	<p>Port Speed Limit</p> <ul style="list-style-type: none"> Egress and ingress speed limit <p>Security feature</p> <ul style="list-style-type: none"> VLAN port isolation Port + MAC + IP binding <p>Storm Control</p> <ul style="list-style-type: none"> Broadcast / Multicast / Unknown Unicast

FEATURES

Functionality	Description
Security	ARP Attack Prevention
	<ul style="list-style-type: none"> • To prevent the ARP request deception
	<ul style="list-style-type: none"> • To prevent the ARP reply to cheat
	DDOS protection
	CPU Guard (CPU Protection)
	Port Isolation
	IEEE 802.1X
	ACL (Ingress)
	ACL entry number: 512
	L2 / L3 / L4
	IPv4 / IPv6
	TCP / UDP-Based ACL
	MAC-Based ACL
	Port Security
	AAA (Only Authentication)
	<ul style="list-style-type: none"> • RADIUS
SSHv2	
SSL	
<ul style="list-style-type: none"> • SSL v3 	
<ul style="list-style-type: none"> • SSL IPv4/IPv6 	

FEATURES

Functionality	Description
Management	<p>Switch Management</p> <ul style="list-style-type: none"> • WEB UI (HTTP / HTTPS) ,SNMP • Memory & Flash Log • Event / Error Log / Syslog • Support the ping •Check the CPU and memory utilization <p>DHCP Snooping</p> <ul style="list-style-type: none"> • v4 / v6 Client •Prevent illegal DHCP server <p>Network management</p> <ul style="list-style-type: none"> • WEB (IP: 192.168.1.1, username/password: admin/admin) <p>SNMP</p> <ul style="list-style-type: none"> • Trap • v1/v2c/v3 • SNMP v2c; conform to RFC1902, RFC1903, RFC1904, RFC1905, • RFC1906, RFC1907 • The MIB II; conform to RFC1213 • Ethernet MIB; conform to RFC1643 •The bridge MIB; conform to RFC1493 <p>RMON</p> <ul style="list-style-type: none"> •Support group 1, 2, 3, 9 <p>System password protection</p> <p>NTP</p> <p>SNTP</p> <p>Dual Configuration</p> <p>Configuration Upload/Download</p>

FEATURES

Functionality	Description
Management	Firmware Download / Upgrade
	<ul style="list-style-type: none"> • TFTP (RFC783) • HTTP
	Configuration Upload / Download
	<ul style="list-style-type: none"> • TFTP (RFC783) • HTTP
	MIB
	•Standard MIB
Network Discovery	Telnet
	SSH
	Cable Diagnostic
	LLDP (802.1ab)
	LLDP-MED
IPv4	DHCP
	<ul style="list-style-type: none"> • DHCP Snooping • v4 / v6 Client
	Static Routing
IPv6 Features	IPv6 Management
	IPv6 over Ethernet (RFC2464)
	IPv6 Dual Stack (RFC 4213)
	ICMP v6 (RFC4884)
	IPv6 Neighbor Discovery (RFC 4861)
	IPv6 Address / Mask / Gateway
	SNMP over IPv6

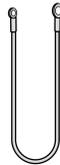
FEATURES

Functionality	Description
<p>EEE Features</p>	<p>EEE</p> <ul style="list-style-type: none"> • 802.3az (10M is not supported) • Cable Length • HTTP

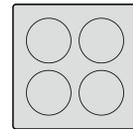
S2800S-8T2F-P Accessories



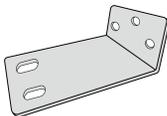
Power Cord x1



Grounding Cable x1



Rubber Pad x1



Mounting Bracket x2



1m Cat5e UTP Ethernet Patch Cable x1



M3 Screw x6

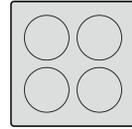
S2800S-24T4F-P / S2800S-24T2F / S2800S-48T4F Accessories



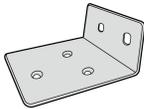
Power Cord x1



Grounding Cable x1



Rubber Pad x1



Mounting Bracket x2



1m Cat5e UTP Ethernet Patch Cable x1

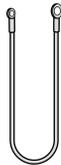


M3 Screw x6

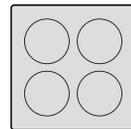
S2800S-8T Accessories



Power Adapter x1



Grounding Cable x1



Rubber Pad x1



Screw Expansion Tube x2



1m Cat5e UTP Ethernet Patch Cable x1



M3 Screw x2



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