S4600-28C-SI L2 Gigabits Dual Stack Intelligent Switch Datasheet

■ Product Overview

S4600-28C-SI is a L2 Gigabits intelligent switch designed for carrier and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (VLAN VPN, Voice VLAN, QinQ, N:1 VLAN Translation etc), Ethernet Ring Protection Protocol (G.8032), classified bandwidth control, intelligent security control, OAM(Operations, Administration and Maintenance),　manageability functions and Triple-Play services which fulfill the network requirements demanded by carrier network, MAN access. S4600-28C-SI offers green features like IEEE 802.3az (Energy Efficient Ethernet), Fan-less design feature, which can dramatically lower power consumption, achieve green energy and save the cost for the carrier and MAN users.

Equipped with the full GE ports and 2SFP & 2Combo uplink ports, the series integrates advanced management and security functions to provide performance and scalability.

■ Main Features

➢ Green Energy

- S4600-28C-SI comply with **IEEE 802.3az** (Energy-Efficient Ethernet) standard, dramatically lower power consumption

- With **Innovative port-LED Shut-off** function, the user can automatically set the switch port-LED UP or DOWN at a specified time period according to their needs to achieve functional, energy-saving correct results.

- Full account of low noise requirements of the environment, S4600-28C-SI uses **Fanless Design** to real-time temperature monitoring system, and reduces the noise pollution.

➢ Simple and Flexible Operation and Maintenance

- Full Ethernet **OAM** technology (IEEE802.3ah/802.1ag), VCT, DDM (Digital Diagnostic Monitoring) and other features achieve rapid detection of the network failures; reduce operation and maintenance difficulty.

➢ Enhanced Security

- S4600-28C-SI provides a variety of security mechanisms like SYN Flood, Land, ICMP Flood attack prevention and other DOS class technology, BPDU Guard and Root Guard which avoid accidental topology loops and prevent illegal edge devices become root to cause unnecessary flapping.

- 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 any standard-based RADIUS server.

- Access Control Lists (**ACL**s) can be used to restrict access to sensitive network resources by denying packets and forward by different policies. User-defined ACL provides more flexible access control for users.

- S4600-28C-SI support **DHCP snooping**, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrust ports. With DHCP Snooping binding and option82 enabled, it can combine modules like dot1x and ARP, or implement user-access-control independently.

- S4600-28C-SI support much more L2 security features such as **ARP guard**, **Anti-ARP scanning**, and other ARP and **MAC Security** technology to protect network security and reliability.

➢ High Reliability

- S4600-28C-SI support 4 Gigabit uplink ports, which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of network.

- **G.8032** provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology. S4600-28C-SI support G.8032 v2 and can be deployed in a variety of complex network topologies including single ring, tangent ring, intersecting rings, double rings and other home networking.

➢ High adaptability VLAN Features

- S4600-28C-SI support 802.1Q and port based VLAN as well as MAC based VLAN, Voice VLAN and Protocol VLAN.

- Abundant QinQ technology including **Normal QinQ**, **Selective QinQ**, and **Flexible QinQ**, gives users maximum freedom to configure QinQ policy.

- **N:1 VLAN Translation** feature can translate multiple VLAN tags in the frames from access ports into one specified VLAN Tag. It provides a strong technical support for QoS policy convergence.

➢ Abundant Multicast Features

- S4600-28C-SI also support **MVR** (Multicast VLAN Register), selectively allows traffic to cross between different VLANs for bandwidth and security reasons. With MVR Trunk function, which could associate multicast VLAN to trunk port, S4600-28C-SI combines the VLAN data into the same link, saving lots of resources for users.

- S4600-28C-SI could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated to multicast devices.

■ Specifications

Item	S4600-28C-SI
Ports	24 x 10/100/1000Base-T + 2 x 100/1000Base-X (SFP) + 2 x GbE Combo (SFP/GT) ports

Item	S4600-28C-SI
Performance	
Switching Capacity	56Gbps
Forwarding Rate	41.7Mpps
MAC ADDRESS	16K
Jumbo Frame	12K
ACL Table	2048
Queues per port	8
VLAN TABLE	4K
Physical	
Dimension(W×H×D)	440mm x 220mm x 44mm
weight	2.83kg
Power Input	100~240VAC, 50~60Hz
Power Consumption	20W
Cooling	Passive
Temperature	Working 0°C~50°C, Storage -40°C~70°C
Relative Humidity	10%~90%,non-condensing
EMC Safety	CE, RoHS
Main Features	
Forwarding	Storage and Forwarding
VLAN	Port-based VLAN, IEEE802.1Q, private VLAN, Protocol VLAN, Voice VLAN, MAC VLAN Normal QinQ, Selective QinQ, Flexible QinQ VLAN Translation, N:1 VLAN Translation
DHCP	IPv4/IPv6 DHCP Client,IPv4/IPv6 DHCP Relay Option 82, Option 37/38 IPv4/IPv6 DHCP Snooping,IPv4/IPv6 DHCP Server
Reliability	Spanning Tree	802.1D STP, 802.1W RSTP, 802.1S MSTP Root Guard, BPDU Guard, BPDU Forwarding

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	LACP	16 groups / 8 ports
	L2 Ring Protection	MRPP ITU-T G.8032 Loopback Detection Fast Link
Security		IP ACL, MAC ACL, MAC-IP ACL, User-Defined ACL Time Range ACL ACL on VLAN interface Storm Control based on packets and bytes Port Security, MAC Limit based on VLAN and Port

Item	S4600-28C-SI
	Anti-ARP-Spoofing , Anti-ARP-Scan, ARP Binding
	ND Snooping
	DAI
	IEEE 802.1x
	Authentication, Authorization, Accounting
	Radius, TACACS+
Multicast	IGMP v1/v2/v3 snooping, IGMP Fast leave
	MVR
	MLD v1/v2 snooping
	IPv4/IPv6 DCSCM
QoS	8 Queues Per Port
	Bandwidth Control
	Flow Redirect
	Classification based on ACL, VLAN ID, COS, TOS, DSCP,
	Policing Based on Port and VLAN
	Single Rate single barrel double color for Policing
	Remark DSCP, COS/802.1p, Precedence, TOS
	SP, WRR, SWRR, WDRR for Scheduling
	Match the IP fragmentation of message
Maintenance and Operation Management	TFTP/FTP
	CLI, Telnet, Console
	Web/SSL (IPv4/IPv6)
	SSH (IPv4/IPv6)
	SNMPv1/v2c/v3
	SNMP Trap
	Public & Private MIB interface
	RMON 1,2,3,9
	Ping, Trace Route
	Radius Authentication
	Syslog (IPv4/IPv6)
	SNTP/NTP (IPv4/IPv6)
	Dual IMG, Multiple Configuration Files
	Port Mirror, CPU Mirror, RSPAN
	sFlow (S4600-28P/52P-SI)
	OAM EFM
	VCT, DDM
	ULDP(like Cisco UDLD)
	LLDP/LLDP MED
Green Energy	IEEE 802.3az (Energy Efficient Ethernet)

Item	S4600-28C-SI
	Fanless (10P and 28P)
	LED Shut-off

■ Ordering information

Product	Description
S4600-28C-SI	L2 Gigabit Intelligent Ethernet Switch with 24 10/100/1000Base-T, 2 100/1000Base-SFP and 2 GbE combo (SFP/GT) ports, 100-240VAC Power Input

■ Contact us

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