

---

# S4600-28X-SI 10G Intelligent Ethernet Access Switch



S4600-28X-SI

## ■ Product Overview

S4600-28X-SI is L2 10G intelligent switch designed for carrier and MAN networks. It supports comprehensive QoS, enhanced VLAN functions (Dynamic VLAN, 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. S4600-28X-SI Series switch 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.

S4600-28X-SI is equipped with the full GE ports and 4 SFP+ uplink ports, it integrates advanced management and security functions to provide performance and scalability.

## ■ Main Features

### ➤ Green Energy

- S4600-28X-SI comply with **IEEE 802.3az** (Energy-Efficient Ethernet) standard, dramatically lower power consumption.
- Full account of low noise requirements of the environment, S4600X-SI uses **Fanless Design**, and reduce 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

- S4600-28X-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 (**ACLs**) 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.
- S4600-28X-SI supports **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.
- S4600-28X-SI supports abundant 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

- S4600-28X-SI supports 4 10G 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. S4600-28X-SI supports 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

- S4600-28X-SI supports 802.1Q and port based VLAN as well as MAC based VLAN, Voice VLAN and Protocol VLAN.
- Abundant QinQ technology including **Normal 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

- S4600-28X-SI also supports **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, S4600-28X-SI combines the VLAN data into the same link, saving lots of resources for users.
- S4600-28X-SI could prevent multicast traffic from flooding via IGMP Snooping, while multicast traffic is only forwarded to ports associated to multicast devices.

## ■ Specifications

Item	S4600-28X-SI
Ports	24 x 10/100/1000Base-T + 4 x 10GE(SFP+)
Management port	1x Console port

Item	S4600-28X-SI	
	1x USB2.0 interface	
	1x Reset key	
Performance		
Switching Capacity	128Gbps	
Forwarding Rate	95Mpps	
MAC ADDRESS	16K	
Jumbo Frame	10K	
ACL Table	384	
Queues per port	8	
VLAN TABLE	4K	
Physical		
Dimension(WxHxD)	440mm x 207mm x 44mm	
Power Input	100~240VAC, 50~60Hz	
Power Consumption	21W	
Cooling	Passive	
Temperature	Working 0°C~50°C, Storage -40°C~70°C	
Relative Humidity	5%~95%,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	
L3 Features	Static Routing, PBR	
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
	LACP	64 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	

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

---

## ■ Ordering information

Product	Description
S4600-28X-SI	L2 10G Ethernet Switch with 24 10/100/1000Base-T and 4 10GE(SFP+) ports, 100-240VAC Power Input

## ■ Contact us

For more detail information about DCN product, please contact:

URL: <http://www.DCNglobal.com>

Email: [sales@DCNglobal.com](mailto:sales@DCNglobal.com), [dcnsales@digitalchina.com](mailto:dcnsales@digitalchina.com)

Address: Digital Technology Plaza, NO.9 Shangdi 9th Street, Haidian District, Beijing, China