

# S4600-SI Series L2 Gigabit Access Switch

### **Product Overview**

DCN S4600-SI series are full GbE standalone switches provide enterprise-class access for campus and branch applications. These fully managed switches can provide advanced Layer 2 features as well as optional Power over Ethernet Plus (PoE+) power, it integrates advanced management and security functions to provide performance and scalability. It is ideal solution for enterprise and carrier access network deployment

Description
• 8x10/100/1000Base-T+2x100/1000Base-X (SFP)
• 1 console, 1 reset port
• PoE+, up to 124w
AC power supply
<ul> <li>Switching capacity: 20Gbps</li> </ul>
• Forwarding rate: 14.88Mpps
• 48x10/100/1000Base-T+4x100/1000Base-X (SFP)
• 1 console, 1 reset port
AC power supply
<ul> <li>Switching capacity: 104Gbps</li> </ul>
• Forwarding rate: 77.4Mpps
Passive cooling design on R3.0



## **Key Features and Highlights**

#### **Green Energy**

S4600-SI series complies with **IEEE 802.3az** (Energy-Efficient Ethernet) standard, dramatically lower power consumption

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

A full account of low noise requirements of the environment, S4600-SI uses **Fanless Design and Smart fan** strategies to real-time temperature monitoring system, and reduce the noise pollution.

#### **Enhanced Security**

S4600-SI series 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-SI series support **DHCP snooping**, which prevents DHCP attacks and illegal DHCP SERVER by setting trust ports and untrusted ports. With DHCP Snooping binding and option82 enabled, it can combine

modules like dot1x and ARP, or implement user-access-control independently.

S4600-SI series supports many 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-SI series 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 the network.

**G.8032** provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology. S4600-SI series 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.

#### **Abundant Multicast Features**

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

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

## **Product Specifications**

Item	S4600-52P-SI(R2.0/R3.0)	S4600-10P-P-SI
Ports	48 x 10/100/1000Base-T + 4 x 100/1000Base-X (SFP) Auto-MIDX	8 x 10/100/1000Base-T + 2 x 100/1000Base-X (SFP) Auto-MIDX
	Performance	
<b>Switching Capacity</b>	104Gbps	20Gbps
Forwarding Rate	77.4Mpps	14.88Mpps
MAC ADDRESS	16K	8K
Jumbo Frame	12K	10K
ACL Table	2304	1536
Queues per port	8	8
VLAN TABLE	4K	4K
	Physical	
$Dimension(W{\times}H{\times}D)$	442mm x 43.6mm x 240mm	340mm x 43.6mm x 200mm
Power Input	100~240VAC, 50~60Hz	100~240VAC, 50~60Hz



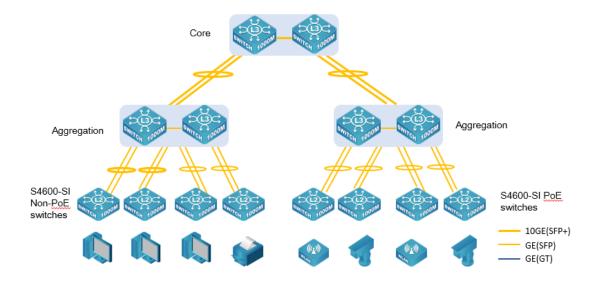
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Ite		S4600-52P-SI(R2.0/R3.0)	S4600-10P-P-SI		
Power Con	sumption	36W	144W		
Cooling		Active(R2.0) / Passive(R3.0)	Passive		
Temperatu					
	ive Humidity 5%~95%, non-condensing				
EMC Safet	ty	CE, RoHS			
РОЕ		NA	IEEE 802.3af POE (15.4W)		
			IEEE 802.3at POE+ (30W)		
			PoE output 124w		
D		Main Features			
Forwardin	g	Storage and Forwarding	VII AND DOLL I VII AND VII' VII AND MACO		
			VLAN, Protocol VLAN, Voice VLAN, MAC		
VLAN		VLAN			
		Normal QinQ, Selective QinQ, Flexible Qir			
		VLAN Translation, N:1 VLAN Translation			
		IPv4/IPv6 DHCP Client, IPv4/IPv6 DHCP	Relay		
DHCP		Option 82, Option 37/38	CID CI		
		IPv4/IPv6 DHCP Snooping, IPv4/IPv6 DHC			
	Spanning	802.1D STP, 802.1W RSTP, 802.1S MSTP			
	Tree	Root Guard, BPDU Guard, BPDU Forward	ing		
		16 groups / 8 ports	8 groups / 8 ports		
	LACP	10 groups / 8 ports	o groups / o ports		
Reliability		MRPP			
	I 2 Dina	ITU-T G.8032			
	L2 Ring	Loopback Detection			
	Protection	Fast Link			
		IP ACL, MAC ACL, MAC-IP ACL, User-D	Defined ACL		
		Time Range ACL			
		ACL rules can be configured to port, VLAN	J		
		Storm Control based on packets and bytes			
		Port Security, MAC Limit based on VLAN			
Security		Anti-ARP-Spoofing, Anti-ARP-Scan, ARP	Binding		
		ND Snooping			
		DAI			
		IEEE 802.1x			
		Authentication, Authorization, Accounting			
		Radius, TACACS+			
		IGMP v1/v2/v3 snooping, IGMP Fast leave			
Multicast		MVR			
171utteust		MLD v1/v2 snooping			
		IPv4/IPv6 DCSCM			
		8 Queues Per Port			
		Bandwidth Control			
		Flow Redirect	OG TOG DGCD		
		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 a message			
Maintenance and Operation		TFTP/FTP			
		CLI, Telnet, Console, Reset			
		Web/SSL (IPv4/IPv6)			
		SSH (IPv4/IPv6)			
		SNMPv1/v2c/v3			
		DINIVII V 1/ V 2C/ V 3			



Item	S4600-52P-SI(R2.0/R3.0)	S4600-10P-P-SI
	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	
	IEEE 802.3az (Energy Efficient Ethernet)	
Green Energy	Fanless (10P and 28P)	
	LED Shut-off	

# **Typical Application**

S4600 Series switch is deployed as Gigabit access in a Campus / ISP network S4600 Series POE switch supports Access points, cameras and other PE devices





# **Order Information**

Product	Description		
S4600-52P-SI(R2.0)	L2 Gigabit Intelligent Ethernet Switch with 48 10/100/1000Base-T and 4 100/1000Base-SFP ports, 100-240VAC Power Input		
S4600-52P-SI(R3.0)	L2 Gigabit Intelligent Ethernet Switch with 48 10/100/1000Base-T and 4 100/1000Base-SFP ports, 100-240VAC Power Input. Passive cooling design. This model is only for projects.		
S4600-10P-P-SI	L2 Gigabit Intelligent Ethernet PoE Switch with 8*10/100/1000Base-T and 2*100/1000Base-SFP ports, 100-240VAC Power Input. 30w POE+ Supported. PoE output 124w		