DCN Europe

Switch to
a New Generation

ETHERNET AGGREGATION SWITCHES

S5750X SERIES

S5750X-24S6X-EI

S5750X-48S6X-EI

Network Security

Stacking

Advanced QoS

10Gb Ports

Features without hiding costs

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NETWORK SECURITY

- IP Source Guard provides Layer 2 source IP address filtering to prevent spoofing of an unauthorized host uses authorized hosts IP address. This feature uses dynamic DHCP Snooping and a static input of the source IP address.
- The S5750X series support DHCP Snooping which prevent attacks with using an illegal DHCP server by setting trusted ports and unused ports. By enabling DHCP Snooping Binding and DHCP option 82, you can combine modules such as dot1x and ARP DAI or independently implement user access control.
- Access control list (ACL) can be used to restrict access to sensitive network resources by filtering packets and forwarding according to established rules. The user-defined ACL provides more flexible access control for users.
- The S5750X series supports much more L2 security features such as ARP protection, ARP scanning and other ARP and MAC security technologies to protect network security and reliability.

STACKING

- Virtual Switch Framework (VSF) can connect multiple DCN switches into one logical device, achieving sharing of information boards and data between different switches. By using this functionality, the devices in the stack have increased performance and the number of ports. VSF technology is also characterized by simplified management and greater operational reliability.

ADVANCED QOS FUNCTIONS

- With 8 queues per port, the S5750X-SI series allows differentiated classification of up to 8 types of traffic. Traffic is determined according to IEEE802.1p, DSCP, IP priority and TCP / UDP port number, ensuring optimal performance of real-time applications such as voice and video.

10 GIGABIT PORTS

- The S5750X series of access switches offers up to 6 x 10 gigabit ports that can work as a redundant link working with various ring protection functions, effectively increasing scalability and network performance.
- All SFP + ports support 10 gigabit as well as 1 gigabit transmission.

FEATURES WITHOUT HIDING COSTS

- With using switches of the S5750X series you can be sure that the equipment which you are using has all available functionalities without the needs to purchase additional licenses.

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S5750X	24S6X-EI	48S6X-EI
Switch Classification		
Layer 3 lite	✓	✓
Connectivity		
100/1000Base-X (SFP)	24	48
1000/10GBase-X (SFP+)	6	6
(10/100Base-T RJ45) – Mgmt OOB port	1	1
Console port – RS-232 (RJ45)	1	1
USB port	1	1
Performance		
Switch fabric speed	168 Gb/s	168 Gb/s
Forwarding rate	125 Mp/s	125 Mp/s
Packet buffer	2 MB	2 MB
Jumbo frames	12 K	12 K
MAC address table [1]	32 K	32 K
Multicast MAC address table	2 K	2 K
ACL table [2]	3 K	3 K
Routing table [3]	1 K	1 K
Multicast routing table [4]	1 K	1 K
ARP table	1 K	1 K
Number of Vlan interfaces (IP)	1 K	1 K
CPU clock	1 GHz	1 GHz
Flash memory	32 MB SPI + 128 MB NAND	32 MB SPI + 128 MB NAND
RAM memory	1 GB	1 GB
Resilience and availability		
IEEE 802.1D STP/802.1w RSTP/802.1s MSTP	✓	✓
IEEE 802.3ad LACP	✓	✓
Virtual Cable Testing	✓	✓
DDM	✓	✓
LLDP / LLDP-MED	✓	✓
VRRP	✓	✓
Loop guard	✓	✓
ERPS (ITU-T G.8032)	✓	✓
MRPP	✓	✓
ULPP	✓	✓
Traffic control		
IEEE 802.3x Full duplex & Flow control	✓	✓
802.1Q VLANs	4 K	4 K
Port-based VLAN	✓	✓
Protocol-based VLAN	✓	✓
IP subnet based VLAN	✓	✓
Voice VLAN	✓	✓
Mac VLAN	✓	✓
Super VLAN	✓	✓
LACP algorithm of source/destination IP (load balance)	✓	✓
GVRP	✓	✓
802.1ad Vlan Stacking (QinQ)	✓	✓
Selective QinQ	✓	✓
Flexible QinQ	✓	✓
Security		
Layer 2 MAC filtering	✓	✓
BPDU Tunnel	✓	✓
BPDU Guard	✓	✓
Login authentication and authorization by Radius and Tacacs+	✓	✓
TACACS+ accounting/ auditing	✓	✓
SSH v1/v2	✓	✓
DHCP/DHCPv6 snooping	✓	✓
IP/IPv6 Source Guard	✓	✓
Port security	✓	✓
IEEE 802.1x port-based / mac-based	✓	✓
QoS		
802.1p Priority Queues per Port	8	8
802.1p Queuing method	✓	✓
Trusted COS/TOS/IP Precedence/DSCP/Port number	✓	✓
Broadcast Storm Control	✓	✓
Rate Limiting, port based	✓	✓
Strict priority	✓	✓
Weighted Deficit Round Robin	✓	✓
Weighted Random Early Detection	✓	✓
Strict priority in Weighted Deficit Round Robin	✓	✓

[1] – MAC address Table shared for unicast and multicast (in 1:1 ratio)
[2] – ACL Table shared for ingress and egress (in 1:1 ratio)
[3] – Routing Table for IPv4 shared with IPv6 (in 4:1 ratio)
[4] – Routing Table shared for unicast and multicast (in 1:1 ratio)

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S5750X	24S6X-EI	48S6X-EI
L2/L3 - Multicast		
Multicast VLAN	✓	✓
IGMP v1,v2, v3	✓	✓
IGMP Query	✓	✓
IGMP Snooping (v1,v2,v3)	✓	✓
IGMP Snooping Fast Leave(v2,v3)	✓	✓
PIM-DM/SM/SSM	✓	✓
anycast RP	✓	✓
IPv6 MLD v1/v2 Snooping	✓	✓
Routing		
Static routing IPv4 / IPv6	✓	✓
RIP v1,v2 / RIPng	✓	✓
OSPF v2 / OSPF v3	✓	✓
BGP / BGP4+	✓	✓
Layer 3 IPv6		
IPv4/IPv6 Dual Protocol Stack	✓	✓
IPv6 address	✓	✓
IPv6 Tunneling	✓	✓
Manageability		
GUI (Web)	✓	✓
Telnet / SSH	✓	✓
SNMP v1/v2c/v3	✓	✓
TFTP/FTP	✓	✓
Configuration backup and restore	✓	✓
Multilevel CLI	✓	✓
DNS Client	✓	✓
DHCP Client/Relay/Server	✓	✓
DHCP option 43/60/82	✓	✓
DHCPv6 option 37/38	✓	✓
DHCPv6 Relay/Server	✓	✓
SNTP / NTP	✓	✓
sFlow	✓	✓
Port Mirroring per IP/TCP/UDP	✓	✓
RSPAN	✓	✓
ERSPAN	✓	✓
Cluster	✓	✓
Stack (VSF)	✓	✓
IEEE 802.3ah EFM	✓	✓
IEEE 802.1ag CFM	✓	✓
MIB		
RFC1066 – TCP/IP-based MIB	✓	✓
RFC1213, 1157 – SNMPv2c/v3 MIB	✓	✓
RFC1493 – bridge MIB	✓	✓
RFC2674 – bridge MIB extension	✓	✓
RFC1643 – ethernet MIB	✓	✓
RFC1757 – RMON group 1,2,3,9	✓	✓
RFC2925 – Remote Management MIB	✓	✓
RFC2233 – SMIv2 MIB	✓	✓
Physical		
Dimensions (Width x Height x Depth)	440 mm x 44 mm x 380 mm	440 mm x 44 mm x 380 mm
Operating temperature	0 ºC ~ 50 ºC	0 ºC ~ 50 ºC
Working humidity	10% - 90% (no condensation)	10% - 90% (no condensation)
Cooling	active FAN's: 1	active FAN's: 5
Electrical		
PoE standards	–	–
PoE power budget	–	–
Power supply	230V AC	230V AC
Redundant power supply	230V AC	230V AC
Power consumption	≤ 55W	≤ 85W

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