






S5750 Series L3 mGig Routing Switch

Product Overview

S5750 series mGig switches are a new generation of green, intelligent and secure 2.5G/10G POE/Non-PoE multi-rate access switches launched by DCN. POE ports can support up to 30W/60W power supply capability, achieving 10G/25G/40G high-bandwidth uplink or virtualization expansion. Provide users with high-performance, easy-to-manage, and low-cost WIFI 6 AP access solutions.

Appearance	Description
 <p>S5750M-18X-P-SI</p>	<ul style="list-style-type: none"> 12 x 100/1000M/2.5G/5G/10GBase-T + 6 x 1G/10G/25GE(SFP28) ports 1 console, 1 USB, 1 reset, 1 RJ45 Management port PoE / PoE+ /PoE++ (60w) up to 370w 1 fixed AC & 48VDC RPS Forwarding performance: 405Mpps Switching capacity: 540Gbps
 <p>S5750M-26Q-P-SI</p>	<ul style="list-style-type: none"> 24 x 100/1000M/2.5G/10GBase-T + 2 x 40G(QSFP+) ports 1 console, 1 USB, 1 reset, 1 RJ45 Management port PoE / PoE+ /PoE++(60w) up to 530w with 1 PSU and 1060w 2 PSUs Modular Power supply, standard 1 AC Forwarding performance: 480Mpps Switching capacity: 680Gbps
 <p>S5750M-30X-P-SI</p>	<ul style="list-style-type: none"> 24 x 100/1000M/2.5GBase-T + 4 x 1G/10GE(SFP+) + 2 x 40G(QSFP+) ports 1 console, 1 USB, 1 reset, 1 RJ45 Management port PoE / PoE+ /PoE++(60w) up to 530w with 1 PSU and 1060w 2 PSUs Modular Power supply, standard 1 AC Forwarding performance: 267.84Mpps Switching capacity: 360Gbps

 <p>S5750X-24NT6X-SI</p>	<ul style="list-style-type: none"> ● 24*100M/1G/2.5GBase-T + 6*1G/10G (SFP+) ● 1 console, 1 USB, 1 RJ45 Management port ● 1 fixed AC ● Forwarding performance: 179Mpps ● Switching capacity: 240Gbps
 <p>S5750X-24NT6X-P-SI</p>	<ul style="list-style-type: none"> ● 24*100M/1G/2.5GBase-T PoE + 6*1G/10G (SFP+) ● 1 console, 1 USB, 1 RJ45 Management port ● PoE / PoE+, up to 740w PoE budget ● 1 fixed AC ● Forwarding performance: 179Mpps ● Switching capacity: 240Gbps

Key Features and Highlights

Ready for Wi-Fi 6

S5750 series have mGig ports and also supports Power over Ethernet (PoE), including PoE+ and PoE++(60W). Certainly it is good for 802.11ac and 802.11ax wireless LAN applications and helps you avoid having to run multiple cables between switches and access points and let your networks welcome next-generation traffic speeds and data rates.

Carrier-class reliability

S5750 series provide 10G/25G and 40G uplink ports which could be designed to offer redundant uplinks with various ring protection applications, effectively raised the expansibility and performance of the network.

All the business ports on S5750 series provide 6KV-8KV lightning protection capability which greatly reduces the damage rate of equipment from lightning. G8032 provides sub-50ms protection and recovery switching for Ethernet traffic in a carrier ring topology.

VSF (Virtual Switch Framework)

Virtual Switch Framework can virtualize multiple DCN switches into one logical device, achieving the sharing of information and data tables between different switches. The performance and ports density of virtualized devices is greatly enlarged by times under VSF. VSF also simplifies management work for the network administrator and provides more reliability.

Rich L3 Features

S5750 series deliver high-performance, hardware-based IP routing, RIP, OSPF, and BGP provide dynamic

routing by exchanging routing information with other Layer 3 switches and routers. With S5750 series switch, customers could easily achieve Policy-based Route (PBR), which is important when they need a multi exit application.

Strong Multicast

S5750 series support abundant multicast features. In Layer 2, such as IGMPv1/v2/v3 snooping and fast leave. L3 multicast protocols such as IGMPv1/v2/v3, PIM-DM, PIM-SM, PIM-SSM, and even MSDP. With Multicast VLAN Register (MVR), multicast receiver/sender control and illegal multicast source detect functions; S5750 series provide a great application experience for the customer.

Comprehensive QoS

With 8 queues per port, S5750 series enable differentiated management of up to 8 traffic types. The traffic is prioritized according to IEEE802.1p, DSCP, IP precedence, and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.

It also supports Bi-directional rate-limiting, per port or traffic class preserves network bandwidth, and allows full control of network resources.

Abundant IPv6 Support

S5750 series support IPv6 switching and routing based on hardware for maximum performance. With increased network devices growing the need for larger addressing and higher security become critical, it will be the right product to meet this requirement.

Specifications

Part 1 of total 2:

Item	S5750M-18X-P-SI	S5750M-26Q-P-SI	S5750M-30X-P-SI
Physical port	12 x 100M/1G/2.5G/5G/10G Base-T + 6 x 1G/10G/25G (SFP28) Auto MIDX	24 x 100M/1G/2.5G/10G Base-T + 2 x 40G(QSFP+) ports Auto MIDX	24 x 100/1000M/2.5GBase-T + 4 x 1G/10G(SFP+) + 2 x 40G(QSFP+) ports Auto MIDX
Management port	100/1000M Base-T RJ45 Ethernet Management port Console port (RJ45) Reset button USB2.0 interface		
Performance			
Switching Capacity	540Gbps	680Gbps	360Gbps
Forwarding Rate	405Mpps	480Mpps	267.84Mpps
MAC Address	32K	32K	32K
Routing Table	16K	16K	16K
L3 Interface	Max 1K	Max 1K	Max 1K
Physical			
Dimension (W*H*D)	440mm*44mm*320mm	440mm*44m*350mm (no Power Supply) 440mm*44mm*380mm (with Power Supply)	
Relative Humidity	5%~95% non-condensing		
Temperature	Working 0°C~50°C, storage -40°C~75°C		
Power Supply	Fixed AC + 48VDC	Dual modular hot-swappable AC power supply	
Power Consumption	<35W	<55W	<85W
PoE Budget	370W	530W (single power supply), 1060W (dual power supply)	
PoE	IEEE 802.3af (15.4W) IEEE 802.3at (30W) IEEE 802.3bt (60W)	IEEE 802.3af (15.4W) IEEE 802.3at (30W) IEEE 802.3bt (60W) (only first 8 ports)	IEEE 802.3af (15.4W) IEEE 802.3at (30W) IEEE 802.3bt (60W) (only first 8 ports)
Main Features			
	Port loopback detection LLDP and LLDP-MED UDLD IEEE 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk		

	LACP load balance ERPS (G8032)
	N:1 Port Mirroring RSPAN
	IEEE802.1d(STP) IEEE802.1w(RSTP) IEEE802.1s(MSTP) Root Guard BPDU Guard BPDU Tunnel
	IEEE 802.1Q, 4096 VLAN MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Selective QinQ, Flexible QinQ GVRP N:1 VLAN Translation Broadcast / Multicast / Unicast Storm Control
	IGMP v1/v2/v3 Snooping and L2 Query ND Snooping MLDv1/v2 Snooping
	Port Security
	Flow Control: HOL, IEEE802.3x Bandwidth Control
	Static Routing, RIPv1/v2, OSPFv2, BGP4 OSPFv3, BGP4+ OSPF multiple processes Policy-based routing (PBR) for IPv4 and IPv6 VRRP URPF, ECMP BFD
	IGMP v1/v2/v3, IGMP Proxy, DVMRP, PIM-DM, PIM-SM, PIM-SSM, Anycast RP, MSDP Static Multicast Route Multicast Receive Control Illegal Multicast Source Detect
	ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit Anti ARP Cheat, Anti ARP Scan DNS Client, DNS Relay
L3 Features	ICMPv6, ND, DNSv6 IPv6 Policy-based Routing (PBR) IPv6 VRRPv3, IPv6 URPF, IPv6 RA RIPng, OSPFv3, BGP4+ MLD Snooping, IPv6 Multicast VLAN MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS
QoS	8 Queues SP, WRR, SWRR, WDRR, SWDRR WRED Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number Traffic Policing PRI Mark/Remark
ACL	IP ACL, MAC ACL, IP-MAC ACL Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS Redirect and Statistics Rules can be configured to port, VLAN Time Ranged ACL
Security	IEEE 802.1x AAA

	Port, MAC-based authentication Accounting based on time length and traffic Guest VLAN and auto VLAN RADIUS for IPv4 and IPv6 TACACS+ for IPv4 and IPv6 MAB
DHCPv4/v6	DHCP Server/Client for IPv4/IPv6 DHCP Relay/Option 82 DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
Security Net-work Management	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6 Syslog and external Syslog Server HTTP SSL SNMP MIB, SNMP TRAP FTP/TFTP SNTP/NTP RMOM 1,2,3,9 Authentication by Radius/TACACS SSH v1/v2 Dual firmware images/ Configuration files 802.3ah OAM, 802.1ag OAM
Data Center Features	VSF (Virtual Switch Framework)

Part 2 of total 2:

Item	S5750X-24NT6X-SI	S5750X-24NT6X-P-SI
Physical port	24 x 100M/1G/2.5GBase-T + 6 x 1G/10G (SFP+) Auto MIDX	24 x 100M/1G/2.5GBase-T PoE + 6 x 1G/10G (SFP+) Auto MIDX
Management port	100/1000M Base-T RJ45 Ethernet Management port Console port (RJ45) USB2.0 interface	
Performance		
Switching Capacity	240Gbps	240Gbps
Forwarding Rate	179Mpps	179Mpps
MAC Address	32K	32K
Routing Table	1K	1K
L3 Interface	Max 1K	Max 1K
Physical		
Dimension (W*H*D)	440mm*44mm*380mm	440mm*44mm*380mm
Relative Humidity	5%~95% non-condensing	
Temperature	Working 0°C~50°C, storage -40°C~75°C	
Power Supply	Fixed AC	Fixed AC
Power Consumption	<55W	<820W
PoE Budget	N/A	740W
PoE	IEEE 802.3af (15.4W) IEEE 802.3at (30W)	IEEE 802.3af (15.4W) IEEE 802.3at (30W)
Main Features		

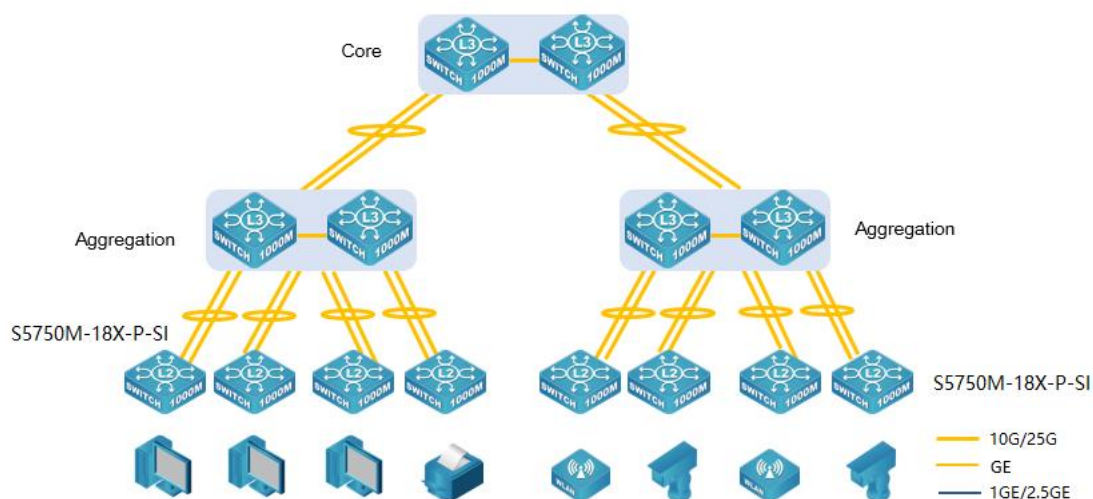
	Port loopback detection LLDP and LLDP-MED UDLD IEEE 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk LACP load balance ERPS (G8032)
	N:1 Port Mirroring RSPAN
	IEEE802.1d(STP) IEEE802.1w(RSTP) IEEE802.1s(MSTP) Root Guard BPDU Guard BPDU Tunnel
	IEEE 802.1Q, 4096 VLAN MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Selective QinQ, Flexible QinQ GVRP N:1 VLAN Translation Broadcast / Multicast / Unicast Storm Control
	IGMP v1/v2/v3 Snooping and L2 Query ND Snooping MLDv1/v2 Snooping
	Port Security
	Flow Control: HOL, IEEE802.3x Bandwidth Control
L3 Features	Static Routing, RIPv1/v2, OSPFv2, BGP4 OSPFv3, BGP4+ OSPF multiple processes Policy-based routing (PBR) for IPv4 and IPv6 VRRP URPF, ECMP BFD
	IGMP v1/v2/v3, IGMP Proxy, DVMRP, PIM-DM, PIM-SM, PIM-SSM, Anycast RP, MSDP Static Multicast Route Multicast Receive Control Illegal Multicast Source Detect
	ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit Anti ARP Cheat, Anti ARP Scan
	DNS Client, DNS Relay
	ICMPv6, ND, DNSv6 IPv6 Policy-based Routing (PBR) IPv6 VRRPv3, IPv6 URPF, IPv6 RA RIPng, OSPFv3, BGP4+ MLD Snooping, IPv6 Multicast VLAN MLDv1/v2, PIM-SM/DM for IPv6, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS
QoS	8 Queues SP, WRR, SWRR, WDRR, SWDRR WRED Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number Traffic Policing PRI Mark/Remark
ACL	IP ACL, MAC ACL, IP-MAC ACL Standard and Expanded ACL Based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS

	Redirect and Statistics Rules can be configured to port, VLAN Time Ranged ACL
Security	IEEE 802.1x AAA Port, MAC-based authentication Accounting based on time length and traffic Guest VLAN and auto VLAN
	RADIUS for IPv4 and IPv6
	TACACS+ for IPv4 and IPv6
	MAB
DHCPv4/v6	DHCP Server/Client for IPv4/IPv6 DHCP Relay/Option 82 DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
Security Net- work Manage- ment	CLI, WEB, Telnet, SNMPv1/v2c/v3 through IPv4 and IPv6 Syslog and external Syslog Server HTTP SSL SNMP MIB, SNMP TRAP FTP/TFTP SNTP/NTP RMOM 1,2,3,9 Authentication by Radius/TACACS SSH v1/v2 Dual firmware images/ Configuration files 802.3ah OAM, 802.1ag OAM
Data Center Features	VSF (Virtual Switch Framework)

Application

100/1000M/2.5G/10G(mGig) access with 10/25G/40G uplink in a campus network

Ideal switch to support access points, cameras. IEEE 802.3bt ready for Wi-Fi 6



Order Information

Product	Description
S5750X-24NT6X-SI	L3 full 2.5G + 10G Switch (24*100M/1G/2.5GBase-T + 6*1G/10G (SFP+)), fixed AC power supply
S5750X-24NT6X-P-SI	L3 full 2.5G + 10G Switch (24*100M/1G/2.5GBase-T PoE + 6*1G/10G (SFP+)), fixed AC power supply, 802.3af/at, 740W PoE output
S5750M-18X-P-SI	Full 10G PoE Ethernet Routing Switch, 12 x 100/1000M/2.5G/5G/10G Base-T + 6 x 1G/10G/25G(SFP28) ports, 1 fixed AC power supply & 48VDC RPS, up to 370W for PoE
S5750M-26Q-P-SI	Full 10G PoE Ethernet Routing Switch, 24 x 100/1000M/2.5G/10G Base-T + 2 x 40G(QSFP+) ports, modular power (2 power modules at most, 1+1 redundancy. Standard with 1 AC power module), Port 1-8 support 60W PoE, 9-24 support 30W PoE, up to 1060W for PoE(2 PSUs)
S5750M-30X-P-SI	Full 2.5G PoE Ethernet Routing Switch, 24 x 100/1000M/2.5G Base-T + 4 x 1G/10G(SFP+) + 2 x 40G(QSFP+) ports, modular power (2 power modules at most, 1+1 redundancy. Standard with 1 AC power module), Port 1-8 support 60W PoE, 9-24 support 30W PoE, up to 1060W for PoE(2 PSUs)
M5750-AC-B	AC power supply, 600W, fit for S5750M-30X-P-SI and S5750M-26Q-P-SI