



S5750M 5G/10G POE multi-giga access L3 mGig routing switch

Product overview

The S5750M-24NT(XT)4Y2C-P-EI switch is a new-generation green, intelligent, and secure 1G/2.5G/5G(/10G) PoE multi-rate access switch introduced by DCN. The PoE ports support power supply capabilities of 30W/60W/90W, enabling high-bandwidth uplink speeds of 10G/25G/40G/100G or virtualized expansion. It provides users with a high-performance, easy-to-manage, and cost-effective WiFi 6/7 AP access solution.

Appearance	Description
 <p>S5750M-24NT4Y2C-P-EI</p>	<ul style="list-style-type: none"> ● 24*1G/2.5G/5G Base-T(POE++) + 4*10G/25G(SFP+) + 2*40G/100G(QSFP28) ● 1 console, 1 USB, 1 RJ45 MGMT ● 2* modular PSU slots ● All copper ports support PoE / PoE+ / PoE++ (90w) ● Forwarding rate: 624.96Mpps ● Switching capacity: 840Gbps
 <p>S5750M-24XT4Y2C-P-EI</p>	<ul style="list-style-type: none"> ● 24*1G/2.5G/5/10GBase-T(POE++) + 4*10G/25G (SFP+) + 2*40G/100G(QSFP28) ● 1 console, 1 USB, 1 RJ45 MGMT ● 2* modular PSU slots ● All copper ports support PoE / PoE+ /PoE++(90w), PoE consumption : 400W PoE(Single PSU (220V AC, 600W)), 800W PoE(Dual PSUs (220V AC, 600W)) 700W PoE(Single PSU (220V AC, 920W)), 1400W PoE(Dual PSUs (220V AC, 920W)) ● Forwarding rate: 654.76Mpps ● Switching capacity: 1.08Tbps

Key features and Highlights

Ready for Wi-Fi 6/7

New S5750M series have mGig ports and also supports Power over Ethernet (PoE), including PoE+ and PoE++(60W/90W). Certainly it is good for 802.11ax and 802.11be 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

New S5750M series provide 25G/100G 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 S5750M series provide 6KV-8KV lightning protection capability which greatly reduces the damage rate of equipment from lightning. G.8032 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

New S5750M 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 new S5750M series switch, customers could easily achieve Policy-based Route (PBR), which is important when they need a multi exit application.

Strong Multicast

New S5750M 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; New S5750M series provide a great application experience for the customer.

Comprehensive QoS

With 8 queues per port, new S5750M 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

New S5750M 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

Item	S5750M-24NT4Y2C-P-EI	S5750M-24XT4Y2C-P-EI
Physical ports	24*1G/2.5G/5G Base-T(PoE++) + 4*10G/25G (SFP+) + 2*40G/100G(QSFP28)	24*1G/2.5G/5/10G Base-T (PoE++) + 4*10G/25G (SFP+) + 2*40G/100G(QSFP28)
Management ports	100/1000M Base-T RJ45 MGMT Console port (RJ45) USB2.0	
Performance		
Switching Capacity	840Gbps	1.08Tbps
Forwarding Rate	654.76Mpps	654.76Mpps
RAM	1G	2G
FLASH	16MB SPI 256MB NAND	
MAC Address	Standard: 48k; Route: 32k; bridge: 96k	
Routing Table	16K	
L3 Interface	65	
Physical		
Dimension (W*H*D)	442mm*45mm*422mm	
Relative Humidity	5%~95% non-condensing	
Temperature	Working 0°C~45°C, storage -40°C~75°C	
Power Supply	Dual hot-swappable AC PSUs: 220V AC(600W); 220V AC(920W). PSU models can not be mixed on one switch.	
Power Consumption	<155W	<170W
PoE Budget	400w PoE(Single PSU (220V AC, 600W)), 800w PoE(Dual PSUs (220V AC, 600W)) 700w PoE(Single PSU (220V AC, 920W)), 1400w PoE(Dual PSUs (220V AC, 920W))	
PoE	IEEE 802.3af (15.4W); IEEE 802.3at (30W); IEEE 802.3bt (60W/90W)	IEEE 802.3af (15.4W); IEEE 802.3at (30W); IEEE 802.3bt (60W/90W)
Main features		
L1/L2	Port loopback detection LLDP and LLDP-MED UDLD	

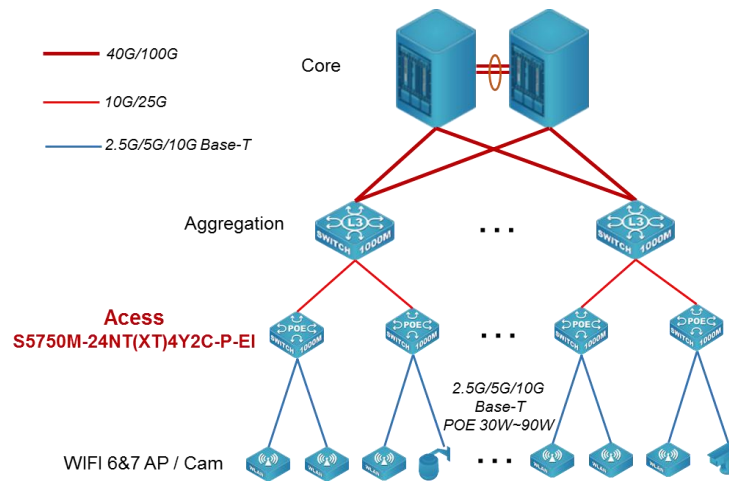
Item	S5750M-24NT4Y2C-P-EI	S5750M-24XT4Y2C-P-EI
	IEEE 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk LACP load balance ERPS (G.8032)	
	N:1 Port Mirroring RSPAN	
	IEEE802.1d(STP) IEEE802.1w(RSTP) IEEE802.1s(MSTP) Root Guard BPDU Guard BPDU Tunnel	
	IEEE 802.1Q, 4096 VLAN MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Selective QinQ, Flexible QinQ (S5750M-18X-P-SI not supports selective 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	
L3	Static Routing, RIPv1/v2, OSPFv2, BGP4 OSPFv3, BGP4+ OSPF multiple processes Policy-based routing (PBR) for IPv4 and IPv6 VRRP URPF, ECMP BFD	
	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+ IPv6 ACL, IPv6 QoS	
Multicast	MLD v1/v2, MLD Proxy, MLD Snooping IGMP V1, V2, V3, IGMP Query, IGMP snooping, IGMP Proxy PIM-DM, PIM6-DM; PIM-SM, PIM6-SM; PIM-SSM, PIM6-SSM PIM-SM/DM for IPv6, IPv6 Anycast RP Static Multicast Route Multicast Receive Control Illegal Multicast Source Detect	
QoS	8 Queues 802.1p, DSCP remarketing IP Precedence Remarketing Outbound queue priority based on 802.1p/DSCP/IP precedence SP, WRR, WDRR, WRED	

Item	S5750M-24NT4Y2C-P-EI	S5750M-24XT4Y2C-P-EI
	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 Network 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) (For 25G ports stacking, only Port25/Port27 support VSF)	

Application

1000M/2.5G/5G/10G (mGig) access with 25/100G uplink in a campus network

Ideal switch to support access points, cameras. IEEE 802.3bt ready for Wi-Fi 6/7 and other high power consumption PoE demand scenarios



Order information

Product	Description
S5750M-24NT4Y2C-P-EI	L3 full 5G + 25G + 100G Switch (24*100M/1G/2.5/5GBase-T(POE++) + 4*10G/25G (SFP28) + 2*40G/100G(QSFP28), 2*Power Supply Slot
S5750M-24XT4Y2C-P-EI	L3 full 10G + 25G + 100G Switch (24*100M/1G/2.5/5/10GBase-T(POE++) + 4*10G/25G (SFP28) + 2*40G/100G(QSFP28), 2*Power Supply Slot
M5750M-AC-600	220V AC 600W power module, Suitable for 25750M-24NT4Y2C-P-EI and 25750M-24XT4Y2C-P-EI
M5750M-AC-920	220V AC 920W power module, Suitable for 25750M-24NT4Y2C-P-EI and 25750M-24XT4Y2C-P-EI