

MyPower S3320 Series L3 Lite Gigabit Access Switch

Datasheet

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Document Title	MYPOWER S3320 SERIES GIGABIT AGGREGATION ROUTING SWITCH FEATURE LIST			
Product Version			Document Revision Number	1.0
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	Accessibility: (Contents, index, headings, numbering) □ Good □ Fair □ Average □ Poor			
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Contents

S3320 Series Switch	5
Key Features	7
Technical Specifications	9
Order Information	12

S3320 Series Switch

MyPower S3320 is a high-performance aggregation Gigabit L3 Lite switch developed by Maipu. It is applied in access or aggregation layer of enterprise LAN network and district access of IP MAN. It can forward L2/L3 Ethernet data frames with line rate, and has rich QoS and multicast capability. It can perform the L2-L7 ACL filtering on packets according to user definitions and combine with 802.1x authentication protocol to meet the security requirements of users.

MyPower S3320 series includes SM3320-28TC-AC, SM3320-52TC-AC, SM3320-28TC, SM3320-52TC, SM3320-52TP, SM3320-52TP.

SM3320-28TC-AC Provides 24 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Fixed AC Power.

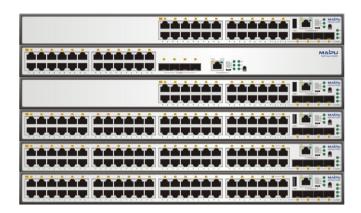
SM3320-52TC-AC Provides 48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Fixed AC Power.

SM3320-28TC Provides 24 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Power Slots.

SM3320-52TC Provides 48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Power Slots.

SM3320-28TP Provides 24 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Power Slots, POE&POE+ Supports.

SM3320-52TP Provides 48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Power Slots, POE&POE+ Supports.



MyPower S3320 Gigabit L3 Lite Switch

MyPower S3320 series switch provides the perfect solutions in the aspects of multi-service capability, security, reliability, management and maintenance. It is the ideal aggregation device of the industry users and carriers. The system provides the security features, such as 802.1X access authentication and ARP anti-attack, which can prevent the virus and vicious attacks and is suitable for the networks with large scale, multiple services and complicated traffic. It has powerful multicast and QoS capability, meeting the real-time requirements of the enterprise network video, audio data and other high-priority services. Besides, S3320 supports QinQ, VLAN Mapping, and multi-service access capabilities. MyPower S3320 series gigabit L3 Lite switch can provide the low-cost, high-performance, and easy-management solutions for the enterprise network access and aggregation, IP MAN and district network aggregation.

Key Features

- Complete L2 protocols, L3 lite protocols
- Perfect security policy
- Powerful access control capability
- Advanced OoS
- > 50ms service protection
- Unique PDI technology
- Comprehensive network management
- Green-power design and lead-free ROSH design
- Horizontal and vertical virtualization technology

• Complete L2 protocols, L3 lite protocols

S3320 series switch provides 802.1d/w/s spanning tree protocol; 802.1q, 802.1p, 802.3ad, 802.3x, GVRP, DHCP, and SNTP protocols; IGMP protocols; Static routing protocols. S3320 supports 1K concurrent multicast data flow; IGMP snooping and IGMP fast-adding/leaving protocol to meet the requirement of customers for multicast protocol.

Perfect security policy

S3320 series switch provides various security policies such as user authority/identity authentication, port security, port rate limitation, port monitoring, address filtering, loopback check, and 802.1X authentication; provides various protect mechanisms for user access and network security. It has perfect security function design and supports user-based SNMP V3, MAC+IP+VLAN binding and 802.1X authentication security policies, and anti network storm attack, anti DOS/DDOS attack, anti ARP attack, and anti network protocol packet attack security technologies. In this way, the attacks and virus can be prevented and it is more suitable for large-scale, multi-service and complicated-traffic networks.

Powerful access control capability

S3320 series switch supports L2-L7 ACL access control. It can classify data flow according to source destination MAC address, source destination IP address, UDP/TCP port number, and IP protocol type, set access control rules according to data classification, that is, set permit or deny, and then apply the rules to VLANs or physical ports.

Advanced QoS

Each port of S3320 supports eight queues and the queue scheduling policies such as SP, RR, WRR, and WDRR; rich priority mappings including $802.1p \rightarrow 802.1p$, $802.1p \rightarrow COS$, DSCP $\rightarrow 802.1p$, and DSCP \rightarrow DSCP; 64Kbps-based port traffic rate restriction and carriers can limit the rate according to the time period; Tail Drop and sRED packet loss algorithm. S3320 supports single-rate three-color mode (srTCM) and dual-rate three-color mode (trTCM) to meet the SLA requirements of operators, including CIR, CBS and PIR.

• 50ms service protection

S3320 series switch adopts Ethernet ring protection technology of Maipu, which can realize 50ms network protection in single-ring, dual-ring/multi-ring, tangent-ring and crossover-ring networking environments. In this way, the service continuity of carriers is ensured and customer satisfaction is improved.

Unique PDI technology

S3120 series switch supports Maipu proprietary PDI (Powered device inspection) technology, switch will constantly detect POE terminal status, and automatically reboot powered device when software malfunction occurred, which can highly reduce the recovery time.

Comprehensive network management

S3320 series switch provides SHELL, TELNET, WEB, SNMP management, third-party software to realize across-platform and large-scale network management and friendly man-machine interface, and provide powerful support for users to manage devices and control network status.

Horizontal and vertical virtualization technology

S3320 series switch supports horizontal virtualization VST (Virtual Switching Technology), multiple switches can be virtualized into one switch, with unified management and data forwarding. VST can realize link aggregation across device, 0 second failover while link malfunction, can highly enhance network stability and bandwidth utilization.

S3320 series switch supports vertical management virtualization technology, S3320 series switch can connect to core switch via Gigabit ports, maximum 128 device can be virtualized into one logical switch for unified management, highly reduce workload for deployment and maintenance, simplify network structure.

• Green-power design and lead-free ROSH design

Technical Specifications

Product model	MyPower S3320			
Frame model	SM3320-28TC-AC SM3320-52TC-AC	SM3320-28TC SM3320-52TC	SM3320-28TP SM3320-52TP	
Product configurations				
Device structure	Desktop			
Physical port	24/48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots	24/48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots	24/48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, POE&POE+ Supports	
RJ45 Console port	1	1	1	
USB Console port	1	1	1	
Reset Button	1	1	1	
10G Extension Slots	2	2	2	
Power Module Slots	Fixed Dual AC	2	2	
Intelligent Fans	Yes	Yes	Yes	
Performance parar	neters			
Switching capability	128Gbps 176Gbps	128Gbps 176Gbps	128Gbps 176Gbps	
Throughput	95.2Mpps 131Mpps	95.2Mpps 131Mpps	95.2Mpps 131Mpps	
Jumbo	12K	12K	12K	
VLAN Entry	4K			
MAC Entry	32K			
Anti-static	Yes			
Anti-lightning	Yes			
MTBF	>80000 hours			
Software Features				

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core switch, maximum 1 switch for unfied manag	.28 device can be virtuali Jement	zed into one logical
Support VST (Virtual Switching Technology), maximum 8 device in one stacking group via Gigabit ports Support vertical management virtualization, with the coordination of core switch, maximum 128 device can be virtualized into one logical switch for unfied management		
Port line detection (VCT); Cluster management; LLDP; SPAN; SNMP v1/v2/v3, MIB, RMON, SYSLOG; Console port login management, Telnet (VTY) remote management, SSH management, Support sFlow traffic analysis		
802.1ag, 802.3ah, E-LMI; EVC; SLA		
EIPS(Ethernet Intelligent Protection Switching), UDLD, ULPP		
Based on port, MAC address, IP address, IP priority, DSCP priority, TCP/UDP port number, protocol type and so on; CAR; SP, WRR,		
DHCP Server, DHCP Client, DHCP Relay, DHCP Snooping, DHCP Option 82, DNS server, DNS client, PING, FTP Server, FTP Client, IP Accounting, UDP Helper, NTP server, NTP client, TFTP		
Port security, port isolation; DHCP snooping, IP source guard, DAI, static ARP binding, ARP Proxy, free ARP; Standard IP ACL, extended IP ACL, standard MAC ACL, extended MAC ACL, advanced ACL; Control plane protection, URPF; illegal ICMP/TCP/IP attack detection, Smurf attack intercepting, LAND attack intercepting, SYN Flood attack intercepting; Ping flood detection; Anti TearDrop; Radius, Tacacs, AAA; 802.1x		
IGMP Snooping, IGMP PROXY, Fast leave, MVR, controllable multicast, MVLAN plus		
Default routing, static routing, RIP V1/V2,VRRP		
Support MAC address learning quantity limitation; static MAC configuration; blackhole MAC; Dynamic and static ARP, proxy ARP, free ARP; Ethernet, Ethernet II, VLAN, 802.3x, 802.1p, 802.1q, 802.1x, 802.3az; Support VLAN based on port, MAC, protocol, IP subnet; Support VLAN Mapping, support Super-VLAN, support Voice VLAN, support GVRP, support PVLAN; QinQ, selective QinQ; STP/RSTP/MSTP; support LACP; support L2 protocol tunnel; Multiple-to-one port mirror, flow mirror; loopback detection		
	configuration; blackhole ARP; Ethernet, Ethernet 802.3az; Support VLAN Support VLAN Mapping, support VLAN, Support LACP; support I support LACP; support I support LACP; support I flow mirror; loopback de Default routing, static routing. IGMP PMVLAN plus Port security, port isolat ARP binding, ARP Proxy standard MAC ACL, exterprotection, URPF; illegal intercepting, LAND attack Ping flood detection; An authentication DHCP Server, DHCP Clie 82, DNS server, DNS clie UDP Helper, NTP server Based on port, MAC add TCP/UDP port number, SP+WRR, WDRR, SP+WEIPS(Ethernet Intelligent 802.1ag, 802.3ah, E-LMPort line detection (VCT v1/v2/v3, MIB, RMON, Setting VCT) remote managementalysis Support VST (Virtual Sw stacking group via Gigal	configuration; blackhole MAC; Dynamic and static ARP; Ethernet, Ethernet II, VLAN, 802.3x, 802.1g 802.3az; Support VLAN based on port, MAC, prof Support VLAN Mapping, support Super-VLAN, sugsupport GVRP, support PVLAN; QinQ, selective Quesupport LACP; support L2 protocol tunnel; Multip flow mirror; loopback detection Default routing, static routing, RIP V1/V2,VRRP IGMP Snooping, IGMP PROXY, Fast leave, MVR, MVLAN plus Port security, port isolation; DHCP snooping, IP standard MAC ACL, extended MAC ACL, advance protection, URPF; illegal ICMP/TCP/IP attack deteintercepting, LAND attack intercepting, SYN Floor Ping flood detection; Anti TearDrop; Radius, Taca authentication DHCP Server, DHCP Client, DHCP Relay, DHCP States, DNS server, DNS client, PING, FTP Server, FIUDP Helper, NTP server, NTP client, TFTP Based on port, MAC address, IP address, IP prior TCP/UDP port number, protocol type and so on; SP+WRR, WDRR, SP+WDRR; RED, WRED, Tail-CEIPS(Ethernet Intelligent Protection Switching), CEIPS(Ethernet Intelligent Protection Switching), CEIPS(Ethernet Intelligent Protection Switching), CEIPS(Ethernet MIR), RMON, SYSLOG; Console port log (VTY) remote management, SSH management, Sanalysis Support VST (Virtual Switching Technology), maximum support vST (Virtual Switching Technology)

Temperature	0~45°C	
Humidity	$10{\sim}90\%$, non-condensing	

Order Information

Series	Model	Description	
MyPower S3320 Series			
MyPower S3320 Series	SM3320-28TC-AC	24 10/100/1000M electric interfaces, four 1000M SFP (combo) interfaces, two 10G Extension Slots, Dual Fixed AC Power.	
	SM3320-52TC-AC	48 10/100/1000M electric interfaces, four 1000M SFP (combo) interfaces, two 10G Extension Slots, Dual Fixed AC Power.	
	SM3320-28TC	24 10/100/1000M electric interfaces, four 1000M SFP (combo) interfaces, two 10G Extension Slots, Dual Power Slots.	
	SM3320-52TC	48 10/100/1000M electric interfaces, four 1000M SFP (combo) interfaces, two 10G Extension Slots, Dual Power Slots.	
	SM3320-28TP	24 10/100/1000M electric interfaces, four 1000M SFP (combo) interfaces, two 10G Extension Slots, Dual Power Slots, POE&POE+ Supports.	
	SM3320-52TP	48 10/100/1000M electric interfaces, four 1000M SFP(combo) interfaces, two 10G Extension Slots, Dual Power Slots, POE&POE+ Supports.	
Extension Mod	lule		
	SM4A-2GEF	2-Port SFP 1G Card for Uplink	
	SM4A-2XGEF	2-Port SFP+10G Card for Uplink	
Extension Module	SM4A-2CX4	Stacking Module, two CX4 interfaces, need configuration with CX4 cables	
	CX4-STACK-5	CX4 Stacking Cable, L=0.5m	
	CX4-STACK-10	CX4 Stacking Cable, L=1.0m	
	CX4-STACK-30	CX4 Stacking Cable, L=3.0m	
Power Supply			
	AD120-1S005E	120W AC Power Supply Module	
Power Module	AD250-1S005E	250W AC Power Supply Module	
Power Module	AD500-1D005E	500W AC Power Supply Module	
	DD500-5D005E	500W DC Power Supply Module	