



MyPower S3120 Series L3 Lite Megabit Access Switch Datasheet

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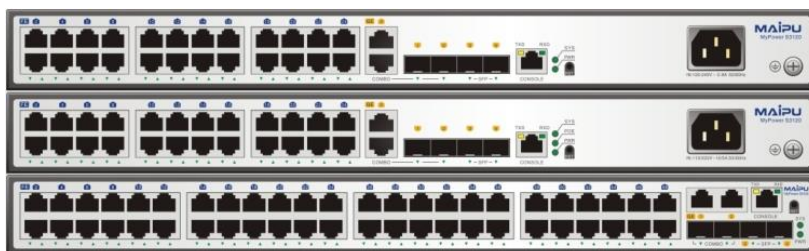
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Overview

MyPower S3120 series switch is the enhanced version of S3100 Series, it is developed by Maipu for the enterprise network access, MAN and district network access, and the building convergence of the medium/small network.

MyPower S3120 series switch provides the perfect solutions in the aspects of multi-service capability, security, reliability, management and maintenance. It is the ideal access 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, S3120 supports QinQ, VLAN Mapping, and multi-service access capabilities. MyPower S3120 series switch can provide the low-cost, high-performance, and easy-management solutions for the enterprise network center, IP MAN and district network access.



MyPower S3120 series includes SM3120-20TC-AC, SM3120-20TP-AC, SM3120-28TC-AC, SM3120-28TP-AC, SM3120-52TC-AC.

SM3120-20TC-AC provides 16 10/100M electric ports and two 1G COMBO (RJ45 or SFP) ports and two 1G SFP interfaces;

SM3120-20TP-AC provides 16 10/100M electric ports and two 1G electric COMBO (RJ45 or SFP) ports and two 1G SFP interfaces, POE&POE+ supports;

SM3120-28TC-AC/SM3120-28TC-DC48 provides 24 10/100M electric ports and two 1G electric COMBO (RJ45 or SFP) ports and two 1G SFP interfaces;

SM3120-28TP-AC/SM3120-28TP-DC48 provides 24 10/100M electric ports and two 1G electric COMBO (RJ45 or SFP) ports and two 1G SFP interfaces, POE&POE+ supports;

SM3120-52TC-AC/SM3120-52TC-DC48 provides 48 10/100M electric ports and two 1G electric COMBO (RJ45 or SFP) ports and two 1G SFP interfaces.

Key Features

- Multi-service supporting capability
- Perfect security policy
- 50ms service protection
- Unique PDI technology
- Powerful access control capability
- Rich QoS mechanism
- Comprehensive network management
- Horizontal and vertical virtualization technology

- **Multi-service supporting capability**

S3120 series switch supports QinQ and VLAN Mapping and provides the flexible solutions for the multi-service isolation of the industry users and the MAN services of carriers. S3120 supports IGMP Snooping and multicast VLAN technology, which is suitable for the triple-play services of carriers and video communication requirement of the enterprise network customers. Meanwhile, S3120 provides PoE remote power supply, which is convenient for deploying IP Phone and wireless AP and meets the multi-service requirement.

- **Perfect security policy**

S3120 series switch supports 802.1x and MAC address authentication function and the static or dynamic binding of the user account, IP and port, realizes the delivering and management of user policies, and diagnoses the network illegal actions in real time. S3120 series switch provides the ARP Guard technology to prevent the ARP spoofing attack and supports the AM function to filter the packets forwarded by the ports. S3120 series switch supports extended ACL. It can classify the data flow according to the destination/source MAC address, source/destination IP address, UDP/TCP port number and protocol type. Meanwhile, it supports the ACL based on time domain and VLAN-based ACL and realizes the hierarchical access control flexibly.

- **50ms service protection**

S3120 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.

- **Powerful access control capability**

S3120 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.

- **Rich QoS mechanism**

S3120 series switch supports 802.1P/DSCP/TOS priority marking and mapping, and provides various priority queue scheduling algorithms, such as SP and WRR. It can realize the QoS functions, such as port speed limitation and traffic monitoring, meeting the requirement of the user network for data processing priority.

- **Comprehensive network management**

S3120 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**

S3120 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.

S3120 series switch supports vertical management virtualization technology, S3120 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.

Specifications

Product	MyPower S3120 Series				
Shelf	SM3120-20TC-AC	SM3120-20TP-AC	SM3120-28TC-AC/ SM3120-28TC-DC48	SM3120-28TP-AC/ SM3120-28TP-DC48	SM3120-52TC-AC/ SM3120-52TC-DC48
Product Configuration					
Device structure	Desktop	Desktop	Desktop	Desktop	Desktop
Physical ports	16 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces;	16 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, POE&POE+ supports	24 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces;	24 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, POE&POE+ supports;;	48 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces;
POE&POE+	/	Yes	/	Yes	/
RJ45 Console	1	1	1	1	1
DDMI	Yes	Yes	Yes	Yes	Yes
Performance parameters					
Switching Capacity	11.2Gbps	11.2Gbps	12.8Gbps	12.8Gbps	17.6Gbps
Throughput	8.4Mpps	8.4Mpps	9.6Mpps	9.6Mpps	13.2Mpps
Jumbo	12K				
VLAN	4K				
MAC	32K				
Anti-static	Yes				
Anti-lightning	Yes				
MTBF	80,000 hours				
Standards & Protocols					
L2 protocol	Support MAC address learning quality 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 Voice VLAN, support GVRP; QinQ, selective QinQ; STP/RSTP/MSTP; support BPDU TUNNEL; Multiple-to-one port mirror, flow mirror				
POE&POE+	802.3af, 802.3at				
Security mechanism	Port security, port isolation; ARP Guard, DAI, static ARP binding, ARP Proxy, free ARP; Standard IP ACL, extended IP ACL, standard MAC ACL, self-reserve ACL, advanced ACL; Control plane protection, URPF; ICMP Flood intercepting, Smurf attack intercepting, Fraggle attack intercepting, LAND attack intercepting, SYN Flood attack intercepting; Local authentication, Radius,				

	Tacacs, AAA; 802.1x authentication				
Network Protocols	Default routing, IGMP, IGMP Snooping, Fast leave, MVR, controllable multicast, DHCP Server, DHCP Client, DHCP Relay, DHCP Snooping, Option 43/60/82, DNS, PING, FTP Server, FTP Client, IP Accounting, UDP Helper, NTP				
QoS	Based on port, MAC address, IP address, IP priority, DSCP priority, TCP/UDP port number, protocol type, etc.; CAR; SP, WRR, SP+WRR; RED, WRED				
Virtual switching technology	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 unified management				
50ms	EIPS(Ethernet Intelligent Protection Switching)				
OAM	Support the network delay, jitter, and packet loss test				
Management	Port line detection (VCT), UDLD; SNMP v1/v2/v3, MIB, RMON, SYSLOG; Console port login management, Telnet (VTY) remote management, SSH management, WEB management, Support the sFlow traffic analysis				
IEEE Standard	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/FX IEEE 802.3z 1000BASE-SX IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation				
	IEEE 802.3x Flow Control IEEE 802.1D STP IEEE 802.1Q Virtual LAN				
	IEEE 802.1P Tag priority IEEE 802.1W RSTP IEEE 802.1S MSTP				
	IEEE 802.3az				
Physical indexes					
Dimension (W × D × H)	440mmx 220mm x 44.2mm	440mmx 220mm x 44.2mm	440mmx 220mm x 44.2mm	440mm x 320mm x 44.2mm	440mm x 220mm x 44.2mm
Power supply					
Input voltage	AC: 90-265V, 50-60Hz DC: -40~-57V				
AC Power consumption (MAX, POE included)	24W	435W	25W	448W	40W
POE Power Consumption (MAX)	/	380W	/	380W	/
Environment parameters					
Working temperature	0-45℃				
Working humidity	10-90% non-condensing				

Order Information

Product Model	Description
MyPower S3120	
SM3120-20TC-AC	16 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, AC power supply;
SM3120-20TP-AC	16 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, POE&POE+ supports, AC power supply;
SM3120-28TC-AC	24 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, AC power supply;
SM3120-28TC-DC48	24 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, DC power supply;
SM3120-28TP-AC	24 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, POE&POE+ supports, AC power supply;
SM3120-28TP-DC48	24 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, POE&POE+ supports, DC power supply;
SM3120-52TC-AC	48 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, AC power supply;
SM3120-52TC-DC48	48 10/100M electric ports and two GE COMBO (RJ45 or SFP) ports and two GE SFP interfaces, DC power supply;