### ΜΔΙΡυ

### MyPower S3220 Series L3 Lite Gigabit Access Switch Datasheet

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## Overview

MyPower S3220 series gigabit L3- switch is the enhanced version of S3200 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. It provides the stable, reliable and secure high-performance switching service for customers.

SM3220-28TP-AC Provides 24 10/100/1000M electric interfaces, four 1000M SFP interfaces, AC host, POE&POE+ supports.

SM3220-52TP-AC Provides 48 10/100/1000M electric interfaces, four 1000M SFP interfaces, AC host, POE&POE+ supports.

SM3220-28TF-AC/SM3220-28TF-DC48 Provides 24 10/100/1000M electric interfaces, four 1000M SFP interfaces, AC host.

SM3220-52TF-AC Provides 48 10/100/1000M electric interfaces, four 1000M SFP interfaces, AC host.

MyPower S3220 Gigabit L2 Switch

MyPower S3220 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, S3220 supports QinQ, VLAN Mapping, and multi-service access capabilities. MyPower S3220 series gigabit L3- switch can provide the low-cost, highperformance, and easy-management solutions for the enterprise network center, IP MAN and district network access.

## **Key Features**

- > Complete L2 protocols supports
- Basic L3 protocols supports
- Multi-service supporting capability
- Perfect security policy
- Rich QoS mechanism
- > 50ms service protection
- Unique PDI technology
- > Comprehensive network management
- Vertical management virtualization technology
- Green-power design and lead-free ROSH design

#### • Complete L2 protocols Supports

MyPower S3220 series switch supports 802.1d/w/s spanning tree protocol; 802.1q, 802.1p, 802.3ad, 802.3x protocols. It supports 4K 802.1Q VLANs, QinQ, and GVRP dynamic VLAN protocols to make that different services and users cannot access each other, ensure the confidentiality of service data, improve the security of the whole network system, and save the network bandwidth.

#### • Multi-service supporting capability

MyPower S3220 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. S3220 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, S3220 provides PoE Remote power supply, which is convenient for deploying IP Phone and wireless AP and meets the multi-service requirement.

#### • Perfect security policy

MyPower S3220 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. S3220 provides the ARP Guard technology to prevent the ARP spoofing attack and supports the AM function to filter the packets forwarded by the ports. S3220 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.

#### • Rich QoS mechanism

MyPower S3220 provides 8 queues per port, 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.

#### • 50ms service protection

S3220 series switch adopts Ethernet ring protection technology of Maipu, which can realize 50ms network protection in single-ring, dual-ring/multiring, 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

S3220 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.

#### Vertical management virtualization technology

S3220 series switch supports vertical management virtualization technology, 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

Adopting EEE chipset and intelligent variable speed fan, S3220 is excellent in energy saving. According to  $10^{\circ}$  rule, the reliability and life of semiconductor chip are related with working temperature. The working temperature increases  $10^{\circ}$  and the reliability of semiconductor reduces a half, while the working temperature and power consumption are in direct proportion. S3220 series switch improves the product life and stable running of high-end devices, saves the running energy consumption of devices, and meets the green environmental protection requirements.

# **Specifications**

Product	MyPower S32	220 Series		
Shelf	SM3220- 28TP-AC	SM3220- 28TF- AC/SM3220- 28TF-DC48	SM3220- 52TP-AC	SM3220- 52TF-AC
Product Confi	guration	·		
Device structure	Desktop	Desktop	Desktop	Desktop
Physical ports	24 100/1000M four 1000M SF	electric interfaces, P interfaces	48 100/1000M e four 1000M SFP	electric interfaces interfaces
POE&POE+	Yes	No	Yes	No
RJ45 Console	1	1	1	1
USB Console	1	1	1	1
Intelligent Fans	Yes	Yes	Yes	Yes
DDMI	Yes	Yes	Yes	Yes
Performance	Parameters			
Backplane bandwidth	56Gbps		104Gbps	
Throughput	42Mpps		77.3Mpps	
Jumbo	12K			
VLAN	4K			
MAC	32K			
Static Routing Entry	16			
Anti-static	Yes			
Anti-lightning	Yes			
MTBF	80,000 hours			
Software Feat	atures			
L2 protocol		address learning qu ; blackhole MAC; Dy		
al & Proprietary 1		,		Page 9 of

Working temperatur e	0-45℃			
Environment p Anti-Surge	6KV			
POE Power Consumptio n	380W	N/A	760W	N/A
Maximum AC Power consumptio n	458W (POE included)	43W	884W (POE included)	65W
Input voltage	AC: 90-265V, 50- DC: -40~-57V		99414/	6EW
Power supply				
Dimension (W $\times$ D $\times$ H)	440mm*380 mm*44mm	440mm*320m m*44mm	440mm*38 0mm*44m m	440mm*320mm *44mm
Physical index	es			1
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			
Virtual switching technology	Support vertical management virtualization, with the coordination of core switch, maximum 128 device can be virtualized into one logical switch for unfied management			
Manageme nt	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			
Ethernet OAM	802.1ag, 802.3ah, E-LMI, EVC, SLA			
Reliability	EIPS(Ethernet Intelligent Protection Switching), UDLD, ULPP			
QoS	Based on port, MAC address, IP address, IP priority, DSCP priority, TCP/UDP port number, protocol type and so on; CAR; SP, WRR, SP+WRR, WDRR, SP+WDRR; RED, WRED, Tail-drop			
Network Protocols	IGMP Snooping, Fast leave, MVR, controllable multicast, IGMP proxying, MVLAN plus, 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			
Security mechanism	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 authentication			
POE&POE+	802.3af、802.3at			
L3 protocol	Static routing			
	802.1x, 802.3az subnet; Support Voice VLAN, sup STP/RSTP/MSTF	net, Ethernet II, VL ; Support VLAN bas t VLAN Mapping, su pport GVRP, suppor P; support LACP; su port mirror, flow m	sed on port, MAG pport Super-VLA t PVLAN; QinQ, pport L2 protoco	C, protocol, IP NN, support selective QinQ; bl tunnel;

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Working humidity	10-90% non-condensing
numbulty	

# **Order Information**

Product Model	Description
MyPower S3220	
SM3220-28TP-AC	Network management L3 lite switch with 24 10/100/1000M electric interfaces, four 1000M SFP interfaces, and AC host, 380W POE Power Consumption
SM3220-52TP-AC	Network management L3 lite switch with 48 10/100/1000M electric interfaces, four 1000M SFP interfaces, and AC host, 760W POE Power Consumption
SM3220-28TF-AC	Network management L3 lite switch with 24 10/100/1000M electric interfaces, four 1000M SFP interfaces, and AC host
SM3220-28TF-DC48	Network management L3 lite switch with 24 10/100/1000M electric interfaces, four 1000M SFP interfaces, DC host
SM3220-52TF-AC	Network management L3 lite switch with 48 10/100/1000M electric interfaces, four 1000M SFP interfaces, and AC host