

MAIPU

MyPower S3100 Series Switch Datasheet

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Overview

MyPower S3100 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. It provides the stable, reliable and secure high-performance switching service for NGN.

MyPower S3100 series switch provides the perfect solutions in the aspects of multi-service capability, security, reliability, management and maintenance. It is the idle 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, S3100 supports QinQ, VLAN Mapping, and multi-service access capabilities. MyPower S3100 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 S3100 series switch contain the following models:

SM3100-9TC provides 8 10/100M electric ports and one 1G Combo interfaces;

SM3100-9TP provides 8 10/100M electric ports and one 1G Combo interfaces, 150W POE Power Consumption;

SM3100-10TC provides 8 10/100M electric ports and two 1G Combo interfaces;

SM3100-10TP provides 8 10/100M electric ports and two 1G Combo interfaces, 150W POE Power Consumption;

SM3100-26TC provides 24 10/100M electric ports and two 1G Combo interfaces;

SM3100-28TC provides 24 10/100M electric ports, four 1G Combo interfaces;

SM3100-28TP provides 24 10/100M electric ports, two 1G Combo interfaces and two 1G SFP interfaces, 400W POE Power Consumption;

SM3100-28FC provides 24 10/100M SFP ports, two 1G Combo interfaces and two 1G SFP interfaces;



MyPower S3100-9TC/9TP-AC



MyPower S3100-10TC/10TP-AC/DC



MyPower S3100-26TC-AC



MyPower S3100-28TC-AC



MyPower S3100-28TP-AC



MyPower S3100-28FC-AC

Key Features

- **High-density and expansibility**
- **Higher performance of the hardware**
- **Multi-service supporting capability**
- **Perfect security policy**
- **Rich QoS mechanism**
- **Rich Metro Ethernet features**
- **Supporting IPv6 protocol stack**

Product Features

- **Multi-service supporting capability**

MyPower S3100 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.

S3100 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, S3100 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 S3100 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.

MyPower S3100 provides the ARP Guard technology to prevent the ARP spoofing attack and supports the AM function to filter the packets forwarded by the ports.

MyPower S3100 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 S3100 provides four port queues, 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.

- **Supporting IPv6 protocol stack**

MyPower S3100 supports IPv6 protocol stack. The L3 interface can be configured with the IPv6 address. It supports IPv6 Ping/Tracert/Telnet IPv6 ACL and MLD Snooping, meeting the smooth transition of carriers and education network from IPv4 to IPv6.

Specifications

Product Model	SM3100-9TC SM3100-9TP SM3100-10TC SM3100-10TP	SM3100-26TC	SM3100-28TC SM3100-28TP	SM3100-28FC
Product configuration				
Structure	Desk-top			
Version	E1	E2	SM3100-28TC (E2) SM3100-28TP (E1)	E1
Access port	8-port FE	24-port FE	24-port FE	24-port FEF SFP
UP Link Port	1-port 1G Combo (9TP/9TC) 2-port 1G Combo(10TP/10TC)	2-port 1G Combo	4-port 1G Combo	2-port 1 Combo+2-port 1G SFP
PoE	Yes	/	Yes	/
AC & DC	AC/DC	AC/DC	AC/DC AC(POE)	AC/DC
Performance parameter				
Switching capability	3.6Gbps	8.8Gbps	12.8Gbps	12.8Gbps
MAC entries	16K	16K	28TC (E2)8K 28TP 16K	16K
VLAN	4K			
Jumbo frames	10/100 Ports 2K, 1G Ports 10K	9K	9K	10/100 Ports 2K, 1G Ports 10K
Aggregation groups	13	13	8	13
QinQ	Yes	Yes	yes	yes
Queue/Port	8	8	8	8
Multicast groups	1K	512	512	1K
Standards & Protocols				

L2 protocol	VLAN, ,GVRP, MSTP, BPDU Tunnel, BPDU guard, supporting 16 spanning tree instances; Traffic control, broadcast storm suppression, external loop detection, link aggregation, 1:1 and N:1 port mirroring, UDLD, LLDP Aging time and add/remove static MAC MAC Black Hole 1:1 and N:1 VLAN switching				
Multicast	IGMP Snooping, Fast leave, multicast VLAN, controllable multicast MLD v1/v2 Snooping				
QoS	Each port supports 8 queues. Supporting 802.1p/TOS/DSCP priority and mapping; Port speed limitation and traffic monitoring Queue scheduling: SP, WRR,SP+WRR Bandwidth control based on MAC Sour.&Dest. , IP Add. , TCP Port and UDP Port				
Application protocol	FTP, TFTP, HTTP, SNTP, DNS Client DHCP Client, DHCP Snooping, Option82				
Security mechanism	Supporting 802.1X and Guest VLAN, MAC-based authentication Port isolation IP+MAC+port+VLAN binding manually MAC address binding and MAC quantity limitation ARP packet speed limitation and ARP Guard Standard ACL and extended ACL, ACL based on time domain, VACL Supporting AM Supporting CPU protection Anti-DOS attack Telnet based on Security IP Prevent unauthorized user				
Management	SHELL, WEB, TELNET, SSH, SNMP V1/V2/V3 Different Level Authorization System logs Supporting RADIUS, TACACS+ RMON				
IEEE standards	IEEE 802.3 (10BASE-T) IEEE 802.3u (100BASE-T) IEEE 802.3z (1000BASE-X) IEEE 802.3ab (1000BASE-T) IEEE 802.3ae (10G BASE) IEEE 802.1ad (QinQ) IEEE 802.3ad (Link Aggregation) IEEE 802.3x (Flow Control) IEEE 802.1d (STP) IEEE 802.1Q (Virtual LAN) IEEE 802.1w (RSTP) IEEE 802.1s (MSTP) IEEE 802.1p (Cos priority) IEEE 802.1x (port authentication)				
Physical index					
Dimension (W×D×H) mm	250mm×180mm×44mm (9TC/10TC) 335mm×220mm×44mm (9TP/10TP)	335mm×220mm×44mm	440mm*220mm*44mm (28TC) 440mm*360mm*44mm (28TP)	440mm*220mm*44mm	
Power supply					
Input voltage	AC: 100-240VAC, 50-60Hz DC: -48V				
Power consumption (MAX)	≤12W	≤14W	≤22W (28TP) ≤18W (28TC)	≤35W	≤25W
Environment parameter					

Working temperature	0-50°C
Working humidity	10-90% no-condensing

Order Information

Product	Description
SM3100-9TC/TP Ethernet switch host	
SM3100-9TC-AC	8 10/100M electric ports, one 1000M Combo interface, AC
SM3100-9TP-AC	8 10/100M electric ports, one 1000M Combo interface, AC, 150W POE Consumption, AC
SM3100-10TC/TP Ethernet switch host	
SM3100-10TC-AC	8 10/100M electric ports, two 1000M Combo interface, AC
SM3100-10TC-DC	8 10/100M electric ports, two 1000M Combo interface, DC
SM3100-10TP-AC	8 10/100M electric ports, two 1000M Combo interface, AC, 150W POE Consumption, AC
SM3100-26TC Ethernet switch host	
SM3100-26TC-AC	24 10/100M electric ports, two 1000M Combo interfaces, AC Version E2
SM3100-26TC-DC48	24 10/100M electric ports, two 1000M Combo interfaces, DC
SM3100-28TC/28TP Ethernet switch host	
SM3100-28TC-AC	24 10/100M electric ports, four 1000M Combo interfaces, AC Version E2
SM3100-28TC-DC48	24 10/100M electric ports, four 1000M Combo interfaces, DC
SM3100-28TP-AC	24 10/100M electric ports, four 1000M Combo interfaces, 400W POE Power Consumption, AC
SM3100-28FC Ethernet switch host	
SM3100-28FC-AC	24 100M SFP ports, two 1000M Combo interfaces, two 1000M SFP interfaces, AC
SM3100-28FC-DC48	24 100M SFP ports, two 1000M Combo interfaces, two 1000M SFP interfaces, DC