



# MyPower S3100 Series Reversed POE Switch Datasheet

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# Overview

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MyPower S3100 series Reversed POE switch is a new high performance desk-top L2 Ethernet switch developed by Maipu for community broadband access, triple-play, and IPTV of various carriers. Besides providing the functions of the traditional L2 switch completely, MyPower S3100 series network management switch is positioned in the MAN application of the carrier whose power is inconvenient to deploy, applying the POE technology to the switch flexibly. It is the carrier-class SNMP management access switch whose power is fed by the user end backward via the network cable. With the innovative design scheme, the central office does not need to deploy any power, reducing the deploying difficulty, maintenance workload and failure probability of the device power. Meanwhile, it also can meet the using requirement of the green environment protect, realizing the operation target of no user and zero power consumption, which is suitable for the large deployment requirement of the carrier.



MyPower S3100-10TC-PTE RpoE Switch



MyPower S3100-26TF-PTE RPOE Switch

# Key Features

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- **Reversed power receiving function**
- **Advanced port adaptability**
- **Complete protocol supporting**
- **Multi-service supporting capability**
- **Rich QoS capability**
- **Rich ACL capability**
- **Intelligent network management function**
- **Hardware design of anti-harsh environment**

# Product Features

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- **Reversed power receiving function**

As for the problem the carrier meets when deploying the network that the 220V power line is difficult to connect and maintain and the using cost is high, Maipu applies the Reversed POE technology to the switch flexibly. The Switch can receive the remote power from customer side, so the switch does not need any internal power, the device adopts the POE power supply box from the user end to work, so as to simplify the deployment and reduce the maintenance cost.

- **Advanced port adaptability**

Port 10/100M, half/full-duplex auto-sensing, MDI-X/MDI-II polarity auto identifying; when the port rate is 10M, adopt the standard class-5 wire and the transmission distance can reach 150m; when the port rate is 100M, the transmission distance can reach 120m, meeting the deployment requirement of many dispersed users in the county and building.

- **Complete protocol supporting**

S3100 supports IEEE 802.3, IEEE 802.3x, IEEE 802.3u, IEEE 802.ad, IEEE 802.1D, and IEEE 802.1Q protocol, Q-in-Q, meeting various L2 function requirements of the carrier customers flexibly.

- **Multi-service supporting capability**

S3100 supports the 802.1Q function, the port-based isolation function, IGMP Snooping and multicast VLAN technology, which is suitable for the technology requirements of the triple play construction of the carrier and can meet the deployment requirement of the IPTV service. S3100 supports port-based wire speed function and can provide different bandwidth services according to the service requirements of different users, meeting the service operation requirement.

- **Rich ACL capability**

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.

- **Intelligent network management function**

S3100 provides SNMP/Telnet/WEB/MIB management interface, simplifying the configuration content, reducing the technical requirement for the maintainers and the maintenance workload, meeting the daily maintenance requirement of the carrier.

- **Hardware design of anti-harsh environment**

MyPower S3100 Series adopts the design of full-metal shell, meeting the high-temperature environment requirement and fall-off or stacking requirement; meanwhile, the full-metal design improves the anti-lighting and anti static capability greatly and the Ethernet port can meet the normal using requirement of 4kv lightning strike; the switch adopts the no-fan nature ventilation design, so there is no possibility of fan damage, reducing the failure caused by the ventilation; the switch itself does not have the AC power, so it cannot cause the failure caused by unstable power in harsh environment and the power failure rate of the device is lower than the same kind of product.

# Specifications

Product Model	S3100-26TF-PTE	S3100-10TC-PTE
<b>Product configuration</b>		
Structure	Desk-top	
Version	E1	
Fixed ports	24-Port 10/100Base-T, 2-Port 1G Combo For Uplink	8-port 10/100 Base-T , 2-Port 1G Combo for Uplink
Power	Reversed POE Supply, port 1 is PoE out put	
<b>Performance parameter</b>		
Switching capability	8.8Gbps	5.6Gbps
MAC entries	8K	
VLAN	4K	
Jumbo frames	2K	
Aggregation groups	13	
QinQ	yes	
Queue/Port	8	
Multicast groups	1K	
<b>Standards &amp; Protocols</b>		
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	
Multicast	IGMP Snooping, Fast leave, multicast VLAN, controllable multicast MLD v1/v2 Snooping	
Ring Protection	Spanning Tree (MSTP/RSTP/STP), and Private 50ms Ring Protection	
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, SNMP, 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 802.1ad (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)
<b>Physical index</b>	
Dimension (W×D×H) mm	335mm×220mm×44mm
<b>Power supply</b>	
Power consumption (MAX)	≤20W
<b>Environment parameter</b>	
Working temperature	0-50℃
Working humidity	10-90% no-condensing

# Order Information

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Product	Description
<b>S3100-26TF-PTE Reversed POE Switch</b>	
S3100-26TF-PTE	24 10/100M electric ports, two 1000M Combo interface, Port 1 is normal POE interface, Port 2~24 are Power Receiving interfaces
S3100-10TC-PTE	8 10/100M electric ports, two 1000M combo interface port 1 is normal PoE ,
<b>Remote power supply module</b>	
POE15-1PSE	Reversed POE Injector, 2x10/100M RJ45 Ports, 20W POE Output Consumption