



# MyPower S6600A Series 10G Distribution Routing Switch

---

## Datasheet

*Maipu Communication Technology Co., Ltd*  
No. 16, Jiuxing Avenue  
Hi-Tech Park  
Chengdu, Sichuan Province  
P. R. China  
610041  
Tel: (86) 28-85148850, 85148041  
Fax: (86) 28-85146848, 85148139  
URL: [http:// www.maipu.com](http://www.maipu.com)  
Mail: [overseas@maipu.com](mailto:overseas@maipu.com)

All rights reserved. Printed in the People's Republic of China.

No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise without the prior written consent of Maipu Communication Technology Co., Ltd.

Maipu makes no representations or warranties with respect to this document contents and specifically disclaims any implied warranties of merchantability or fitness for any specific purpose. Further, Maipu reserves the right to revise this document and to make changes from time to time in its content without being obligated to notify any person of such revisions or changes.

Maipu values and appreciates comments you may have concerning our products or this document. Please address comments to:

*Maipu Communication Technology Co., Ltd*  
No. 16, JiuXing Avenue, Hi-Tech Park  
Chengdu, Sichuan Province  
P. R. China  
610041  
Tel: (86) 28-85148850, 85148041  
Fax: (86) 28-85146848, 85148139  
URL: [http:// www.maipu.com](http://www.maipu.com)  
Mail: [overseas@maipu.com](mailto:overseas@maipu.com)

All other products or services mentioned herein may be registered trademarks, trademarks, or service marks of their respective manufacturers, companies, or organizations.

---

# Contents

---

<b>Overview.....</b>	<b>4</b>
<b>Key Features.....</b>	<b>6</b>
<b>Technical Specifications.....</b>	<b>9</b>
<b>Order Information .....</b>	<b>11</b>

# Overview

---

MyPower S6600A is Maipu new multi-service 10G distribution routing switch developed by Maipu. It adopts the ASIC+NP architecture design, provides the stable, reliable, and secure L2/L3 data wire-speed switching services for the next generation network, owns the advanced 10G Ethernet technology, supports various high-density interface board, and meets the high-density, high-throughput requirements of the distribution devices at the distribution layer. S6600A provides the new-generation core data switching service technology for the enterprise network with the services as the distribution. It supports the chassis with four slots, eight slots, respectively and provide the 100Gbps-level backplane bandwidth and switching capacity.



MyPower S6600A Series Distribution Switch

S6600A adopts the carrier-class reliability design and passive backplane technology and supports the control redundancy, switching redundancy, and power redundancy. Its board card, fan, and power supply are hot-swappable. Besides, it supports the STP/RSTP/MSTP/EIPS/VRRP protocols to realize the link redundancy and ensure that the services are not disconnected when the network fails in various networking modes. S6600A provides rich functions. For example, the hardware supports IPv6; provides various IPv6 networking modes and service applications;

supports L2/L3/star/ring/tree MAN networking technologies; provides complete QoS and multicast supporting technologies.

As the network distribution data switching platform, S6600A can cooperate with the other series switches of Maipu to provide a full range of MAN, LAN, and WAN solutions for the sectors of operators, financial services, government, energy, transportation, education, military, large and medium-sized enterprises. It is widely used in the distribution area for data center, district, and IP MAN networks.

# Key Features

---

- **Advanced hardware structure to ensure Tbps-level backplane and switching capacity**

MyPower S6600A switch adopts the ASIC+NP structure, provides passive copper backplane, realizes the intra-board and inter-board L2/L3 wire-speed distributed forwarding via Crossbar switching matrix, and performs high-speed route searching via powerful ASIC chip, thereby improving the forwarding performance and expanding capability greatly, reaching the 100Gbps-level backplane bandwidth and switching capacity, and providing advanced 10G Ethernet supporting, as well as high-density interface board to meet the high-density and high-throughput requirements of the devices at the distribution layer.

- **Separated switching and control plane, ensuring no packet loss**

MyPower S6600A adopts the technology of separating the control card and the switching card. When the control card fails and performs the redundant switching, it does not affect the data forwarding of the switching card and the data of the service cards is still forwarded normally on the switching card, so as to reach the high-reliability requirement of no packet loss.

- **Virtualization technology, achieve unified deployment and management**

MyPower S6600A supports VST management plane virtualization technology, including horizontal virtualization H-VST and virtualized deployment M-VST, it can realize high performance logical switch virtualized by more than one hundred different series of switches, for unified management and deployment.

**Easy management:** The entire virtualization architecture share one management IP address, simplify network topology and management, improve maintenance efficiency, highly reduce OPEX;

**Strong architecture:** With distributed cross-device link aggregation technology, multiple uplinks share load and backup each other, to improve redundancy in the network structure and link resource utilization;

**High stability:** Stacking to achieve local or remote function supports cross-device link bundling functionality to meet the core network links high-speed seamless switching needs.

- **50ms network recovering capability, ensuring that the service is not disconnected forever**

50ms network recovering capability is the telecom network reliability requirement. S6600A realizes the Ethernet fast network recovering capability via the private technology EIPS so that the IP network fault recovering capability improves from tens of seconds to 50ms, ensuring that the service recovers fast and the service is online forever.

- **Rich Ethernet OAM features, making Ethernet manageable**

S6600A supports IEEE802.1ag, IEEE802.3ah, and E-LMI standard Ethernet OAM protocols so that Ethernet devices and Ethernet network have the link status, interface status, and network auto configured management capability. Moreover, S6600A provides IPFIX and SLA functions so that Ethernet has the complete promise service capability.

- **Stable core guarantee mechanism and the redundancy for key components to ensure the carrier-class reliability of the distribution devices**

All key components of S6600A provide the dual-redundancy or multi-redundancy. S6600A supports power redundancy, management module redundancy, switching matrix redundancy, and link redundancy. The power module, fan module, and all service cards of S6600A are hot-swappable, ensuring that the services are not interrupted forever. The special dual-engine backup design ensures the carrier-class reliability of the core switching platform.

- **Perfect network security features ensure that the core devices can provide the complete anti-attack and anti-virus capability**

S6600A adopts excellent security design; supports SNMP V1/V2/V3 based on user security policy, MAC+IP+VLAN binding, and 802.1X authentication; supports the security policies such as anti network storm attack, anti DOS/DDOS attack, anti ARP attack, anti-scan pry attack, anti freaky packet attack, and anti network protocol packet attack to prevent attacks and virus efficiently. It is suitable for large-scale, multi-service, and complicated-flow networks.

- **Low-power consumption and lead-free ROHS design**

According to 10°C rule, the reliability and life of semiconductor chip are related with working temperature. The working temperature increases 10°C and the reliability of semiconductor reduces a half, while the working temperature and power consumption are in direct proportion. The maximum power consumption of MyPower S6600A series 10G distribution routing switch is lower than 1800W, while the lower-power consumption design of S6600A makes the temperature of the board card semiconductor chip lower. Therefore, the low-power consumption design improves the use life and stable running of high-end devices, saves the running energy consumption of devices, and meets the green environmental protection requirements.



# Technical Specifications

Product	MyPower S6600A Series	
Chassis	SM6600A-04	SM6600A-08
<b>Chassis configuration</b>		
Structure	Rack/modular distributed structure design	
Slots of the device	8	12
Control slots	2	2
Service slots	4	8
Switching slots	2	2
Power Slots	4	4
Fan slots	1	1
Console port	1	
Out-band interface	1	
Hot swap	The power supply, fan and board cards support hot-swap	
Power supply redundancy	Supports power supply redundancy (N+M)	
Switching Card redundancy	Supports dual switching card redundancy	
Control Card redundancy	Supports dual control card redundancy	
<b>Performance (SM6600A-04/ SM6600A-08)</b>		
Switch capacity	320Gbps	640Gbps
IPv4 throughput	238Mpps	476Mpps
IPv6 throughput	238Mpps	476Mpps
Average non-fault time	>200,000 hours	
<b>Standards &amp; protocols</b>		
L2 protocol	802.1X, VLAN, PVLAN, STP, RSTP, MSTP, port mirroring, IGMP Snooping, GVRP, Broadcast Storm Control, QinQ, VLAN Translation, AAA function, port binding, address filter, supports cross-board port/flow mirroring, supports RSPAN, IP-based ACL, MAC-based ACL, MAC+IP-based ACL, and Jumbo Frame	
50ms ring	Ethernet Intelligent Protection Switching(EIPS)	

protection	
L3 protocol	Static route, RIPv1/v2, OSPF, BGP4, ISIS, IGMP, PIM-SM, PIM-DM, MBGP, VRRP, equivalent route, policy route, Graceful Restart
IPv6 protocols	IPv4/IPv6 dual stack, TCP6, UDP6, RawIP6, Pingv6, TraceRoute6, Telnet6, FTP6, TFTP6, DNS6, ICMPv6, VRRPv3, DHCP6, ND, PMTUD, RIPv6, OSPFv3, IS-IS6, BGPv4+, IPv6 static routing\IPv6 policy routing
QoS	Supports Diff-serv/QoS, flow monitoring (CAR), SP, WRR, SP+WRR queue scheduling algorithm, 802.1P/DSCP/TOS, queue scheduling mechanism, Two rate Three color (trTcm)
Upper layer application	DHCP/DHCP Option82/DHCP Relay/DHCP Snooping, IGMPv1/v2/v3, IGMPv1/v2/v3 Snooping, PIM-SM/PIM-DM/PIM-SSM
Security mechanism	SSH, ACL flow filtering mechanism, ACL, ARP, SNMPv3, Radius user-graded login authentication, TACACS+, access table host access control, data log, IP address/VLAN ID/MAC address/port binding, packet filtering, packet filtering of application layer
POE	POE and POE+ Supports
System management	SHELL, TELNET, FTP, SNMP V1/V2/V3, IP-SLA, Network management software, Third-party software, sflow, NTP clock
Reliability	BFD for BGP/IS-IS/OSPF/RSVP/VPLS PW/VRRP, Keepalive gateway, Smart link, VRRP, VRRPv3, VRRPE, IP FRR, TE FRR
Virtualization	H-VST 4 device M-VST 128 device
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 (Q-in-Q) 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) IEEE 802.3af (POE) IEEE 802.3at (POE+)
<b>Physical index</b>	
Dimension (W×D×H)	444x480x310 444x480x577
<b>Power supply</b>	
Input voltage (AC)	100-240V, 50-60Hz
Input voltage (DC)	-40~-57V
<b>Environment parameters</b>	
Working temperature	0~55°C
Working humidity	10-90% no-condensing

# Order Information

Model	Description
<b>MyPower S6600A Series</b>	
<b>Chassis and power supply</b>	
SM6600A-04-MF	SM6600A-04 chassis, 2 control engine slots, 2 switching engine slots, 4 service slots (including backplane and fan slot),4 Power Slots
SM66A-MPUA	V1 Version: Control Engine, supporting active/standby backup function (one is mandatory, 1+1 redundancy is optional) (for SM6600A-04),one fixed 1G DDR memory
SM66A-SFUA	V1 Version: Switching Engine; one is mandatory; 1+1 redundancy is optional (for SM6600A-04)
FAN-07A-01	V3 Version: Fan module for SM6600A-04
<b>SM6600A-08-MF</b>	
SM6600A-08-MF	SM6600A-08 chassis, 2 control engine slots, 2 switching engine slots, 8 service slots (including backplane and fan slot),4 Power Slots
SM66A-MPUB	V1 Version: Control Engine, supporting active/standby backup function (one is mandatory, 1+1 redundancy is optional) (for SM6600A-08),one fixed 1G DDR memory
SM66A-SFUB	V1 Version: Switching Engine; one is mandatory; 1+1 redundancy is optional (for SM6600A-08)
SM66A-SIU	V1 Version: Liquid crystal display card (for SM6600A-08)
FAN-13A-01	V3 Version: Fan module for SM6600A-08
<b>AD1000-1S007Z</b>	
AD1000-1S007Z	E2 Version:1000W AC power module
<b>DD1000-5S007Z</b>	
DD1000-5S007Z	V1 Version:1000W DC power module
<b>Service Modules</b>	
SM66A-48GETP-EA	48-port 1000M electric interface module, POE Support
SM66A-24GET24GEF-EA	24-port 1000M electric interface module and 24-port 1000M optical interface module
SM66A-48GET-EA	48-port 1000M electric interface module
SM66A-48GEF-EA	48-port 1000M optical interface module (SFP optical module needs to be configured)
SM66A-8XGEF2QXGE-EA	8-port 10G SFP+ interface and 2-port 40G QSFP interface board (SFP+ optical module and QSFP optical module needs to be configured)