



# Maipu Packet Broker 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>Product Features</b> .....	<b>5</b>
<b>Product Specification</b> .....	<b>7</b>
<b>Order Information</b> .....	<b>9</b>

# Overview

---

Maipu Packet Broker Switch T6600, T5820, and T4320 series products are developed for solving the refined management demand of data flow.

Based on the advanced multi-core and professional split-flow chip customized development technology, Packet Broker Switch integrates the flow collecting and processing service unit, data switching unit, multi-core computing unit, management control unit, converged data collection, business identifying, overload filtering, traffic aggregation, traffic copying, load balancing, data cutting, desensitization, and other functions, so as to meeting various business applications in big data management and analysis environments.

Packet Broker Switch can carry out high-density and high-speed data collection and management tasks, and provide the refined management function of data flow. The highest density can reach 48 10GE interfaces and six 40GE interfaces, meeting the high-performance data collection and shunting requirements.

Maipu is the first whole solution supplier that provides various network data shunting products and support SDN management and control in China, providing the high cost-effective, scalable network data shunting value-added solution for the user.



Packet Broker Switch

# Product Features

---

- Rich data scheduling capability
- Flexible network deployment capability
- Secure and reliable platform architecture
- Advanced SDN management capability

- **Rich data scheduling capability**

Maipu Packet Broker Switch adopts the advanced customized chip design, solving the insufficient traffic mirror performance and bottleneck restriction problem of traditional network devices.

Multi-source port data flow input and multi-destination port data flow output functions support 1-48 group source, destination port flow scheduling, and can combine security audit or business performance analysis system demand to perform the traffic multi-factor Hash load, traffic binding and other extended applications.

In the business data security management application, it can realize the desensitization and blocking processing of the data key fields, intercept the specified packet; support traffic traceability identification, flow type discrimination and other functions. You can perform the secondary refined flow re-direction forwarding/dropping and other management scheduling capability.

- **Flexible network deployment capability**

Maipu Packet Broker Switch provides rich port shapes, meeting application requirements of various analysis scenarios. Provide standalone box-type 1G, 10G, 40G and other rate interfaces. The frame-type device provides the flexible modular port combination. The multiproduct, multi-port combination design can meet the different bandwidth traffic scheduling requirements of the multi-service environment, and also can be used to realize the management deployment of the outband data shunting network.

In the standalone device management mode, support CONSOLE, IP, SNMP, SYSLOG, SSH, RPC API, OPENFLOW and other management modes.

In the multi-level networking architecture mode, Packet Broker Switch integrates Maipu virtual networking capability design and has the distributed architecture, realizing "One network, one IP" management capability, improving the daily operation maintenance efficiency effectively.

- **Secure and reliable platform architecture**

Maipu Packet Broker Switch provides the green energy-saving, secure and reliable guarantee capability.

The product adapts to the front and back ventilation hardware structure of the data center environment. The power supply supports the port micro-current supply protection, high-voltage DC 240V input and other green and low energy consumption design. The hardware structure supports 1+1 redundant power, N+1 redundant fan reliability guarantee.

In terms of system security protection, Packet Broker Switch supports rich identity management capabilities, and has the ability of preventing network storm attack, DOS/DDOS attack, ARP attack function.

- **Industry-leading SDN management capability**

Packet Broker Switch supports the SDN (Software Defined Network) application, realizing the layered deployment of the distributed network taps. It can provide the convenient and efficient modular data shunting management scheduling capability via the flow table management capability and rich traffic scheduling functions of the OpenFlow protocol.

No matter how network infrastructure changes and how to deploy the business analysis system, the SDN solutions provided by Maipu can deploy the network and schedule the traffic on demand.

# Product Specification

Product Model	T4320-28TF T4320-52TF T4320-52F	T4320-56TXQF	T5820-54XF	T6600-03
<b>Hardware Configuration</b>				
Product shape	Box-type	Box-type	Box-type	Frame-type
Dispatch Port	24 or 48*1G electrical ports, 4*10G optical ports/ 48*1G optical ports, 4*10G optical ports	48*1G electrical interfaces, 6*10G optical interfaces, 2*40G optical interfaces	48*10G optical ports, 6*40G optical ports	Modular port combination 48*10G optical ports, three service slots
Dimension (W×D×H)(mm)	440×420×44.2	440×420×44.2	440×500×44.2	442×450×265
Power Input	AC 100~240V, 50/60Hz			
<b>Software Features</b>				
Network Security	Port	Port Security, Port Isolation		
	Authentication	Local authentication, Radius, Tacacs+, AAA		
		802.1x authentication		
Dispatch Function	Forwarding without lost packets	Deformable packet, abnormal packet undifferentiated flow mirror, port rate line-speed flow processing		
	Multi-in single-out	N ports for ingress packets, one port for egress packets, N is limited by the number of the physical ports		
	Single-in multi-out	One port for ingress packets, M ports for egress packets, M is limited by the number of the physical ports		
	Multi-in multi-out	M:N copy based on the port and traffic; M and N are limited by the number of the physical ports		
	Tunnel encapsulation	Support using the VXLAN, GRE, MPIS and other tunnel technologies to perform the remote shunt for packets		
	Traffic identifying	The ingress and egress traffic identifying and filtering function of the mirror traffic port		
	Packet filtering	Support identifying and filtering based on L2 or IP IP five tuple, IP fragment analysis, packet content		
	Traceability identification	Support identifying different port source data		
	Packet load	Load for the output traffic according the packet five tuple, and guarantee the fixed source and fixed destination		
	Remove the packet head	Support removing the MPLS/VLAN and other packet head		
Timestamp ID	Input port nanosecond timestamp identification, supporting NTP clock synchronization			

	Packet statistics	Support egress and ingress traffic port packet statistics
	Packet cutting	Support setting the packet length
	Data desensitization	Shield, disorder, and encrypt the data load, realizing data desensitization
	Protocol independence	It can realize encrypting the independent traffic to forward at the Ethernet upper layer, transparently support various kinds of Ethernet encapsulation protocols, and seamlessly support 802.1Q/QINQ, IPX/SPX, MPLS, PPPOE and other protocols encapsulation.
Distributary network	Parallel networking	Multi-tap networking deployment, support multi-tap across the device flow path design. Support SDN network deployment and OpenFlow 1.3.
	Hierarchical network	It supports multi-layer physical tap equipment networking, multi-device virtualizing a single tap, maintain a management interface, unified design and deployment of the cross-level mirroring traffic path.
Operation maintenance management	Maintaining mode	Console port login management, Telnet (VTY) remote management, SSH management, SNMP v1/v2/v3, SYSLOG



# Order Information

Order information	Description
<b>1G/10G Packet Broker Switch</b>	
T4320-28TF	24*10/100/1000M standard flow ingress/egress electrical interface, 4*SFP+ high-speed flow ingress/egress optical interface (support 10G, Gigabit), modular dual-power slot
T4320-52TF	48*10/100/1000M standard flow ingress/egress electrical interface, 4*SFP+ high-speed flow ingress/egress optical interface (support 10G, Gigabit), modular dual-power slot
T4320-52F	48*1G SFP standard flow ingress/egress optical interfaces, 4*SFP+ high-speed flow ingress/egress optical interfaces (support 10G, Gigabit), modular dual-power slot
AD120-1S005E	120W AC Power Supply, 100V~240V
<b>10G/40G Packet Broker Switch</b>	
T5820-54XF	48*10G standard flow ingress/egress optical interfaces; 6*40G high-speed flow/cascading optical interfaces, four modular fan slots, two modular power slots
T4320-56TXQF	48*1G standard flow ingress/egress electrical interfaces; 6*10G high-speed flow ingress/egress optical interfaces; 2*40G extended high-speed flow/cascading optical interfaces; four fan slots; two modular power slots
FAN-01A-01B	Fan Module, support hot-swap, dissipate the heat by drawing in the air outward
AD250-1D006B-B	AC Power Module, support hot-swap, dissipate the heat by drawing in the air outward
<b>Rack-type Packet Broker Switch</b>	
TM66-03-MF	Chassis, provide two control card slots, three service card slots, four power slots, two fan slots
<b>Card</b>	
TM66-MPUA	Control Card, you can configure two
TM66-48XGEF	Professional tap service card, 48*10G standard flow ingress/egress optical interfaces
TM66-24GET	Professional tap service card, 24*1G standard flow ingress/egress electrical interfaces
TM66-48GEF	Professional tap service card, 48*1G standard flow ingress/egress optical interfaces
<b>Power Module</b>	
AD800-1D005M	800W AC Power Module, support hot-swap
<b>Fan Module</b>	
FAN-7C-01	Fan Module, three-slot host chassis fan module, you can configure two