



MP2900 Datasheet

aiju 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

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

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

Contents

Overview	4
Product Features	5
Product Specification	7
Order Information	10

Overview

MP2900 series router developed by Maipu is one new-generation enterprise-class access router, applicable to finance/government/branches of large enterprise, and headquarters and branches of middle/small enterprise. It integrates various modern network technologies, such as routing, switching, QoS, security, 3G/4G to provide the flexible access modes and secure and high-efficiency service experience for the users.

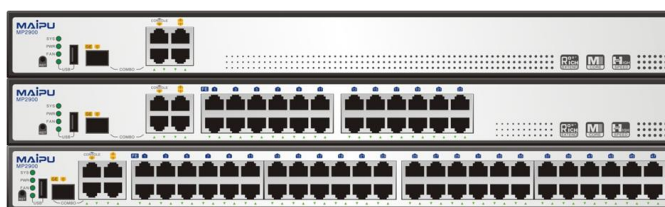


Figure MP2900 panel

Product Features

- **Flexible uplink link**

The device panel integrates two 1000M + one 1000M Combo fixed interfaces. 1000M Combo interface supports 1000M/100M fiber. In the MSTP link optical access scenario, do not need to configure the photoelectric conversion device; meanwhile, uplink supports various mainstream WAN access link technologies, such as Ethernet, 3G, E1, and serial line.

- **Extended slots are flexible and no limitation**

MP2900 has no using limitation for the extended slots. The whole device supports four extended slots and they has no high/low-speed difference and no limitation for the cards; meanwhile, the four extended slots with the two reserved slots of MP2900 support the horizontal or vertical slot merging to provide higher-density service interfaces in the future.

- **High performance**

MP2900 series router reaches more than 600kpps forwarding performance and the configured ACL, QoS, have small influence for the forwarding performance.

- **High density of LAN port**

MP2900 series router supports up to 24 or 48 fixed switch access ports, providing the powerful IP terminal access capability and meeting the requirement of the user for integrating the routing and switch to construct the access network.

- **POE Integration**

MP2900-14P integrates 8 POE LAN ports, which can easily connect various of PD devices such as IP phone, IP cameral, wireless access point, etc.

- **Rich software features**

MP2900 provides rich software features; supports various application technologies, such as IPv4/IPv6, VPN, MPLS, multicast, ACL, MAC address binding, access control, bandwidth limitation, MSTP, and NAT; supports RSVP resource reserving protocol and CAR; provides hierarchical QoS function to ensure the high priority of the key services; support the queue management policies, such as FIFO, PQ, CQ, FQ, CBWFQ, and LLQ.

- **Wireless link technology**

MP29000 can flexibly select the inbuilt 3G/4G module; support two 4G modes, that is, TDD-LTE and FDD-LTE; supports three 3G modes, that is, TD-SCDMA, CDMA2000, and WCDMA; has the seamless upgrade capability to the 3G/4G wireless technology; meanwhile, cooperates with IPSec VPN to provide the secure and flexible wireless WAN access for the customer.

- **Convenient service deployment**

MP2900 supports deploying by pen-drive. When the devices need to be deployed, you just need to insert the private pen-drive to the device so that MP2900 can automatically load the corresponding IOS software and configuration, which will greatly decrease the workload of maintenance.

Product Specification

Hardware specification		MP2900-04	MP2900-14 MP2900-14P	MP2900-24
Processor		Multi-core MIPS processor		
Memory		512M		
Flash		32M		
Fixed interface		2GE + 1COMBO		
Switch ports		0	24FE	48FE
POE interfaces		/	8-Port 15.4W Or 4-Port 30W	/
Control card slots		N/A		
Service engine slots		N/A		
Service sub-card slots		4		
Forwarding performance		>600Kpps		
USB		1		
Console port/AUX		1		
Micro SD card		Support, inbuilt		
Dimension (L x W x H)		442mm×380mm×44.2mm		
Input voltage		100-240V		
Power consumption		28W	37.4W	43.2W
PoE Power consumption		/	120W	/
Temperature		Work temperature: 0 - 45℃		
		Storage temperature: -40 - 70 ℃		
Humidity		Work humidity: 5%-90%		
		Storage humidity: 5%-90%		
Cooling mode		Forced air cooling		
Weight		4.3kg		
Software features				
Link-layer protocol and technology	WAN	FR, MFR		
		HDLC		
		PPP, MP, support LCP/PAP/CHAP negotiation functions		
		PPPoE Client		
		Bridging		
		Virtual Ethernet bridge		
	LAN	Dynamic and static ARP, proxy ARP, free ARP		
		Ethernet, Ethernet II, VLAN (VLAN-BASED PORT VLAN, VOICE VLAN, Guest VLAN), 802.3x, 802.1p, 802.1Q, 802.1x		
		STP/RSTP/MSTP		
		IGMP Snooping, GVRP		
		IEEE802.3ad LACP Link aggregation		
		Port mirroring		

		Broadcast storm suppression
Network protocol	Route protocol	Static route
		RIP v1/v2
		OSPF
		IS-IS
		BGP
		ECMP, route policy, recursive route
	Multicast protocol	IGMP v1/v2/v3
		IGMP Snooping
		PIM-DM, PIM-SM, PIM-SDM, PIM-SSM
		DVMRP, MSDP
	IP application	DHCP Server, DHCP Client, DHCP Relay
		DNS, DDNS
		FTP Server, FTP Client
Ping, Trace		
IP Accounting, UDP Helper, NTP		
Network security	ACL	Standard IP ACL, extended IP ACL, standard MAC ACL, Ethernet protocol ACL, IPv6 ACL, Reflexive ACL
	Security defending	Control plane protect, URPF
	Firewall	Packet filter, status detection, unreasonable IP fragment filter, too-small packet filter, false source address detection
	DDOS anti-attack	ICMPFlood interception, Smurf attack interception, Fraggle attack interception, LAND attack interception,, SYNflood attack interception
	Application control	Traffic control, URL filter
	VPN	L2TP, GRE, IPSec, IKE, RSA
	NAT	Static NAT, dynamic NAT, static NAPT, dynamic NAPT
	Authentication	Local authentication, Radius, Tacacs Portal authentication, 802.1x authentication, MAC authentication
MPLS	MPLS L2 VPN	Martini L2VPN
		Kompella L2VPN
	MPLS/BGP VPN(L3 VPN)	Support one Site belonging to multiple VPNs, support multi-role host
	MPLS TE	Support MPLS TE/FRR
	MPLS multicast	Support MVPN
MPLS OAM	MPLS ping, MPLS trace route	
QoS	Flow classification	Based on port, MAC address, IP address, IP priority, DSCP priority, TCP/UDP port number, protocol type and so on
	Traffic monitoring	CAR, LR
	Congestion management	PQ, FQ, CQ, CBWFQ, LLQ
	Congestion avoidance	RED, WRED
	Traffic shaping	GTS
	Other	H-QoS, Ethernet sub interface QoS, MPLS QoS
Reliability	Link reliable	Support BFD for BGP/IS-IS/OSPF/RSVP/VPLS PW/VRRP and so on
		Support Keepalive Gateway
	Backup function	Support interface backup mode
		Support VRRP, VRRPv3, VRRPE

		Support bandwidth-based load balance and backup
		Support user-based (IP address) load balance and backup
	Service reliable	Support IP FRR, TE FRR
OAM	Network management	SNMP v1/v2/v3, MIB, RMON, SYSLOG, TR069
	System management	Console port login management, AUX port login management, Telnet (VTY) remote management, SSH management, WEB management
	Network quality guarantee (SLA)	Support DHCP, FTP,HTTP,ICMP,UDP public, UDP private, TCP public, TCP private, SNMP protocol test
		Support voice jitter test
		Support network delay, jitter, packet loss rate test

Order Information

Host model	Description
MP2900-04-AC	One RJ45 console port, one USB interface, three 10M/100M/1000M WAN ports (one Combo port), four RM2B slots, FLASH 32M, memory 512M, AC power
MP2900-14-AC	One RJ45 console port, one USB interface, three 10M/100M/1000M WAN ports (one Combo port), 24FE LAN port, four RM2B slots, FLASH 32M, memory 512M, AC power
MP2900-24-AC	One RJ45 console port, one USB interface, three 10M/100M/1000M WAN ports (one Combo port), 48FE LAN port, four RM2B slots, FLASH 32M, memory 512M, AC power
MP2900-14P-AC	One RJ45 console port, one USB interface, three 10M/100M/1000M WAN ports (one Combo port), 24FE LAN port (8-Port 15.4W POE or 4-Port 30W POE), four RM2B slots, FLASH 32M, memory 512M, AC Power
Multi-functional module	
Module Name	Description
RM2B-1E1	Single-port un-channelized E1 module
RM2B-2E1	Two-port un-channelized E1 module
RM2B-1CE1	Single-port channelized E1 module
RM2B-2CE1	Two-port channelized E1 module
RM2B-1SA	Single-port high-speed V35 serial port module
RM2B-2SA	Two-port high-speed V35 serial port module
RM2B-1GE	Single-port GigaEthernet module, Combo port
RM2B-4GET	Four-port GigaEthernet electric interface module
RM2B-3G-C	RM2B single-port 3G card, CDMA2000 mode. CDMA2000 1xEV-DO Rel A/CDMA2000 1xEV-DO Rel B/ CDMA2000 1xRTT version
RM2B-3G-W	RM2B single-port 3G card. WCDMA mode, WCDMA HSDPA/UTMS/EDGE/GPRS version
RM2B-3G-T	RM2B single-port 3G card, TD-HSDPA mode
RM2B-4G-LTE	RM2B-4G-LTE Module, LTE-FDD Mode(band:1/3), TD-LTE Mode(band: 39/40/41), WCDMA, TD-SCDMA, EDGE/GPRS/GSM
Power Supply	
PCR01-48/20	RPS Power for MP2900-14P, 444mm×43.8mm×220mm(W×H×D),V4 Version, 380W Consumption , 90~265V AC Input, Output Voltage 49~51V