



MP3900 Datasheet

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Overview

MP3900 series router developed by Maipu is new-generation enterprise-class aggregation router, applicable to finance/government/branches of large enterprise, or 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, secure and high-efficiency service experience for the users.



Figure MP3900 panel

Product Features

- **Flexible uplink link**

MP3900 integrates one 1000M Base-T + two 1000M Combo fixed interfaces. 1000M Combo interface supports 1000M/100M fiber access. In the MSTP link optical access scenario, do not need to configure the media converter device; meanwhile, uplink supports various mainstream WAN access link technologies, such as Ethernet, 3G/4G, E1/CE1, and V.35 serial line.

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

MP3900 has no using limitation for the extended slots. The whole device supports six extended slots and they has no high/low-speed difference and no limitation for the cards; meanwhile, the six extended slots of MP3900 support the horizontal or vertical slot merging to provide higher-density service interfaces in the future.

- **High performance**

MP3900 series router reaches more than 2.5Mpps forwarding performance and the configured ACL, QoS, have small influence for the forwarding performance.

- **Rich software features**

MP3900 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**

MP3900 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**

MP3900 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 MP3900 can automatically load the corresponding IOS software and configuration, which will greatly decrease the workload of maintenance.

Product Specification

Hardware specification		MP3900-06
Processor		Multi-core MIPS processor
Memory		2G
Flash		32M
Fixed interface		1*GET + 2*GE COMBO
Control card slots		N/A
Service engine slots		N/A
Service sub-card slots		6
Forwarding performance		>2.5Mpps
USB		1
Console port/AUX		1
Dimension (L x W x H)		442mm×380mm×44.2mm
Input voltage		100-240V
Power consumption		30W
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
Dual Monitor		Support
Dual Flash		Support
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 Le 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
	Network security	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 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
		Support bandwidth-based 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
MP3900-06-AC	One RJ45 console port, one USB interface, three 10M/100M/1000M WAN ports (two Combo port), six RM2B slots, FLASH 32M, memory 512M, Dual 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