MAIPU

MP7200 Series Router Datasheet

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

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Contents

MP7200 Series Aggregation Router

The MP7200 series aggregation router is designed for medium-sized to large businesses and enterprise headquarters offices; and edge aggregation of service provider network; it offers a comprehensive platform for large-scale Internet access. The series comprises two models: MP7204 and MP7208 equipped with four/eight MIMs respectively and support 64-port E1 interface access.

MP7200 integrates the “Dual-core” design of Maipu and provides perfect network invest protection design, realizing the smooth upgrade and expanding of the future network.

The MyPower-R software extends network and link protocols, routing and backup protocols, network security services, IP multicast protocols, SNA/DLSw functions, QoS features and network management protocols. It supports BGP edge gateway protocol and MPLS functions – as MPLS PE node in the network.

The MP7200 series router, combined with other Maipu routers, can provide a suite of WAN network solutions for operator, finance, government, energy sources, traffic, education and defense sectors.

MP7200 series router

Key Features

- Configured with three 1000M Combo Ethernet interfaces;
- Provides two kinds of control boards for users to select;
- MP7200 can support up to three OC3 series high-speed ports;
- Supports various network failure protection mechanism;
- Provides Maipu virtual bridge technologies;
- Supports IP-SLA and Hierarchical QoS features;
- Provides rich software functions, supports MPLS/L2TP/VPLS functions;
- Compatible with the main router supplier in the industry;

Technical Specifications

Item	Description					
Product configuration						
Produce model	Console port	RM3A Module Slot	Power Slot	Fan Slot	SNA/IPSec jack	Control card slot
MP7204	1	4	2	1	1	1
MP7208	1	8	2	1	1	1
Performance parameters						
Control card type	RM7A-MPU306-3GE series			RM7A-MPU308-3GE series		
Processor	High-speed MIPS processor			High-speed MIPS processor		
Flash	Default: 16MB Expandable to 80MB			Default: 16MB Expandable to 80MB		
Memory	Expandable to 1GB DDR400			Expandable to 1GB DDR400		
MTBF (mean time between failures)	100000 hours					
Bus bandwidth	8G					
Maximal route table capability	39000 entries /128Mbyte 320000 entries /1Gbyte memory					
Maximal access list capability	500000 entries					
1518-byte delay	4μs					
Standards & protocols						
Link protocol	PPP, PPPoE, SLIP, SDLC, FR,ATM, LLC2, ISDN, X.25, HDLC, LAPB, Ethernet_II, Ethernet_SNAP, 802.1Q,MSTP,ISDN					
Network protocol	TCP/IP, ICMP, UDP, FTP, TFTP, SNMP, TELNET, RLOGIN, DHCP, DHCPv6,HTTP, DNS, DDNS,ARP, DLSw, DDR,NAT,NTP,IPFIX,IPv6					
Routing protocol	Static routing protocol, RIPv1, RIPv2, OSPF,OSPFv3, BGP, ISIS,NDSP, IRMP, SNSP, IGMP, DVMRP,MSDP, PIM-SM/DM/SDM/SSM, Policy route, VBRP, VRRP,MVPN					
Network security	PPP encryption, L2TP,L2TPv3, GRE, policy routing,802.1X, AAA, ACL, IPSec, IKE, PKI, CA, LDP, MPLS VPN, MPLS L2/L3VPN,MPLS TE,VPLS,SSH					
QoS	FIFO, PQ, CQ, FQ, WFQ, CBWFQ, LLQ, RSVP, CAR, SPD, WRED, Traffic Shaping					
Physical index						
Details	MP7204			MP7208		

Dimension (H x W x D)	100mm x 444mm x 360mm	155mm x 444mm x 360mm
Weight	12.5KG (full-load)	20KG (full-load)
Power requirements		
Input voltage (AC)	Voltage: 100~240V Current: 1.2A Frequency: 50/60Hz	
Power consumption	200W	
Input voltage (DC)	Voltage: －40 ～ －57V Current: 1.8A	
Power consumption	200W	
Environmental parameters		
Short-term operation temperature	0～40℃	
Long-term operation temperature	15～30℃	
Short-term operation relative humidity	10～90% Non-condensing	
Long-term operation relative humidity	40～65% Non-condensing	

Order Information

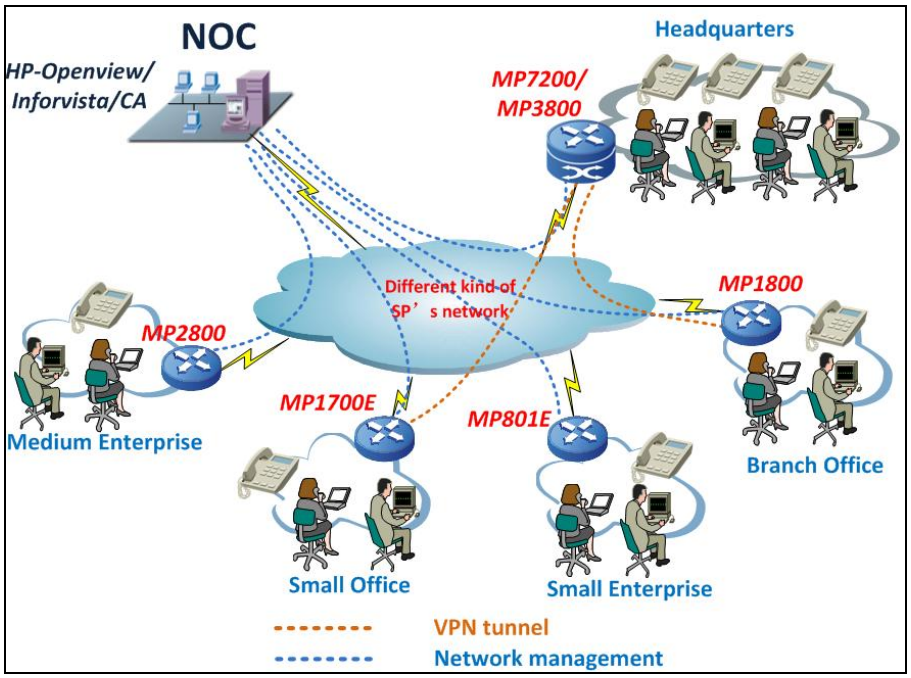
Product model	Description
Chassis (Mandatory)	
RM7208-MF	MP7208 chassis (eight module slots, one control slot, two power slots, one fan slot)
RM7204-MF	MP7204 chassis (four module slots, one control slot, two power slots, one fan slot)
Fan (Mandatory)	
RM7208-FAN	MP7208 FAN
RM7204-FAN	MP7204 FAN
Control card (Mandatory)	
RM7A-MPU306-3GE	Control module. Three fixed 10/100/1000M Combo ports, fixed 16Mbyte flash, one flash slot, two memory slots, one SNA and IPSec jack.
RM7A-MPU308-3GE	Control module. Three fixed 10/100/1000M Combo ports, fixed 16Mbyte flash, one flash slot, two memory slots, one SNA and IPSec jack.(higher performance)
Power supply (Mandatory)	
AD230-1T004	AC power supply module, each MP7200 chassis support two power supply modules for backup mutually. Suitable for MP7208
AD250-1T004	AC power supply module, each MP7200 chassis can support two power supply modules for backup mutually. Suitable for MP7204
DD250-5T0041	DC power supply module, each MP7200 chassis can support two power supply modules for backup mutually. Suitable for MP7208
DD250-5T0042	DC power supply module, each MP7200 chassis can support two power supply modules for backup mutually. Suitable for MP7204
DD250-5T004B1	DC power supply module, each MP7200 chassis can support two power supply modules for backup mutually. Suitable for MP7208(adopt binding post)
DD250-5T004B2	DC power supply module, each MP7200 chassis can support two power supply modules for backup mutually. Suitable for MP7204(adopt binding post)
FLASH	
FLASH8M-D168-64	8Mbyte Flash card (8Mbyte, 168 pins, 64-bit data)
FLASH16M-D168-64	16Mbyte Flash card (16Mbyte, 168 pins, 64-bit data)
FLASH32M-D168-64	32Mbyte Flash card (32Mbyte, 168 pins, 64-bit data)
FLASH64M-D168-64	64Mbyte Flash card (64Mbyte, 168 pins, 64-bit data)
Memory (Mandatory)	
DDR333-128D	Memory: 128Mbyte Access speed: 333MHz
DDR400-256D	Memory: 256Mbyte Access speed: 400MHz

DDR400-512D	Memory: 512Mbyte Access speed: 400MHz
RM3A High-speed MIM module	
RM3A-4SAH	Four-port synchronous/asynchronous serial-port module (supports hot-swappable)
RM3A-4E1H	Four-port non-channelized E1 module (support hot-swappable, 75Ω BNC interface)
RM3A-4E1BH	Four-port non-channelized E1 module (support hot-swappable,120ΩRJ45 interface)
RM3A-8E1H	Eight-port non-channelized E1 module (support hot-swappable, 75Ω BNC interface)
RM3A-8E1BH	Eight-port non-channelized E1 module (support hot-swappable, 120ΩRJ45 interface)
RM3A-4CE1H	Four-port channelized E1/ ISDN PRI module (support hot-swappable, 75Ω BNC interface)
RM3A-4CE1BH	Four-port channelized E1/ ISDN PRI module (support hot-swappable, 120ΩRJ45 interface)
RM3A-8CE1H	Eight-port channelized E1/ ISDN PRI module (support hot-swappable, 75Ω BNC interface)
RM3A-8CE1BH	Eight-port channelized E1/ ISDN PRI module (support hot-swappable, 120ΩRJ45 interface)
RM3A-2FEH	Two-port 100Mbps Ethernet module (supports hot-swappable). The module provides two 100M/10M electric Ethernet interfaces and two slots for 100Mbps SFP optical module slot. The electric interface and optical interface operate exclusively.
RM3A-1ATM-OC3AH	One-port 155M ATM module (155M SFP optical module is required, supports hot-swappable)
RM3A-1POS-OC3H	One-port 155M POS module (155M SFP optical module is required, supports hot-swappable)
RM3A-1CPOS-OC3H	One-port 155M CPOS module (155M SFP optical module is required, supports hot-swappable)
RM3A-8GETH	8-port Gigabit electric port(supports hot-swappable)
SNA/IPSec jack	
SNA	SNA chip
IPsec	IPsec chip
IPsec + SNA	IPsec + SNA chip
Optical module	
SFP-S2-L03P3	The 155M single mode optical module (transmission distance: 20km, LC interface, PECL interface level, wavelength: 1310nm) adopts to RM3A-1ATM-OC3AH, RM3A-1POS-OC3H, RM3A-1CPOS-OC3H,RM3A-2FEH.
SFP-M2-L03P8	The 155M multi-mode optical module (transmission distance: 2km, LC interface, PECL interface level, wavelength: 850nm) adopts to RM3A-1ATM-OC3AH, M3A-1POS-OC3H, RM3A-1CPOS-OC3H ,RM3A-2FEH
SFP-S2-L24P3	The 1.25G single mode optical module (transmission distance: 20km, LC interface, LC interface, PECL interface level, wavelength: 1310nm), adapts to controller card.
SFP-M1-L24P8	The 1.25G multi-mode optical module (transmission distance: 550m, LC interface, PECL interface level, wavelength: 850nm) adapts to controller card.

Typical Applications

Networking for Data Encryption of Branches

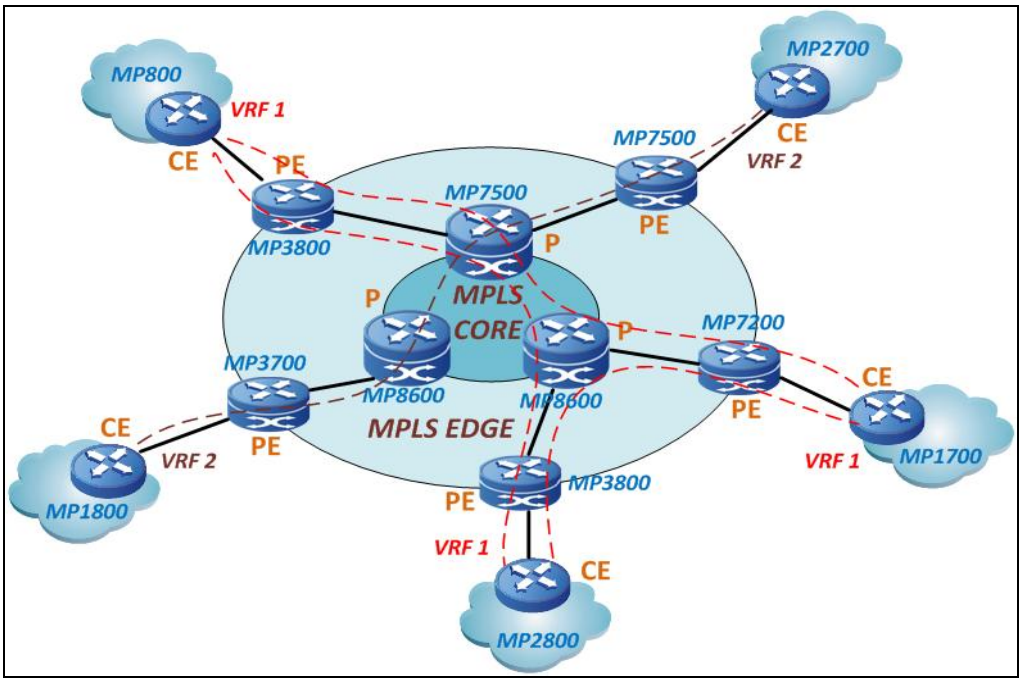
With the business expanding of the group company, the branches and small offices need to exchange information with the headquarters. The medium/low-end routers of Maipu serve as the access devices of the medium/small branches and can set up the security tunnel with the core router in the headquarters via the public network, ensuring the security and reliability of the company information and saving the costs of leased lines.



The headquarters adopts the medium/high-end routers of Maipu. With the high performance and high security of the router, and the VLAN isolation and 802.1X authentication technologies, the security access authentication for the intranet users can be realized.

The branches adopt the medium/low-end routers of Maipu as the access platform of VPN and IPSec.

MPLS VPN Solution



MAIPU routers support MPLS VPN and can be used as CE and PE equipment. MAIPU CE routers include MP800, MP1700, MP1800, MP2700, MP2800, MP3700, MP3800 and MP7200. MAIPU PE routers include MP2800, MP3700, MP3800, MP7200 and MP7500.

In MPLS VPN network, PE runs MPLS and PE router connects to VPN network via VRF. The CE equipments related to the same VPN tunnel can access each other.

MAIPU routers offer various WAN interfaces including E1, CE1, V.35, ISDN, PSTN and Ethernet. The operator can provide primary and secondary lines for enterprise customers simultaneously to enhance MPLS business quality.

Besides, by using MAIPU MPLS access solution, the operator can provide VoIP services without increasing any cost.