



MP1800 Multi-service Router 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

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Overview

MP1800 is one new multi-service router developed by Maipu, integrating the routing technology, switching technology, security technology, 3G, WLAN, traffic control, and network-surf monitoring. It is the MeIN (Multi-service Edge-Intelligent Network) edge network device with high cost-effective and complete functions. It adopts the fixed configuration and modular design. The fixed configuration meets the cable and fiber broadband access. The modules are expanded to provide 3G, xDSL, V24/V35, E1/CE1, and ISDN broadband and narrowband access capabilities, as well as the load balance mechanism of various access combination.

As for the service application trend of the medium/small enterprises, MP1800 provides rich software functions and expanding capabilities. It is the all-powerful communication processing platform of the user at the age of telecom carriers' full service. It can provide the WAN and LAN incorporate security defending and control, as well as firewall, DDOS attack proof, content filtering, ARP attack proof security mechanisms for users. This ensures the normal running of the device in the threatening network environment. It supports DPI-based application identifying and traffic analysis control and realizes the complete analysis and monitoring for network traffic, so as to manage the net-surf actions.

MP1800 completely adapt the MAN access demand based on the telecom-level Ethernet technology. With the intelligent flexible bandwidth and flexible connection quantity, no matter in the peak or in bottom, the network traffic can be in order and bring the perfect experience for the network users. Maipu accumulates rich experiences in the development of the device integrated with the routing and switching technologies. MP1800 is the first in the industry to realize the complete integration of the router QOS and switch QOS on one device, providing the powerful QOS processing capability from LAN to WAN for users and providing the reliable guarantee for the multi-service access.

MP1800 supports rich managing and monitoring functions, and shell, SNMP, WEB and TR069 management modes. Each management mode ensures the local, remote and centralized maintenance methods, and the grading management mechanism, as well as alarming, test, diagnosis, tracking and log functions for users. This can realize the locatable and traceable action auditing and strengthen the monitoring for the actions of the internal network.



MP1800

Key Features

- Wired and wireless integration, supporting 3G and WLAN access and inter-connecting with the wired network seamlessly
- Routing and switching integration, supporting two Ethernet WAN ports + 4/8 Ethernet LAN ports
- Broadband and narrowband integration, supporting N*64K-100M WAN link interface and directly supporting optical interface uplink
- WAN and LAN integration; the software function completely supports controlling and managing WAN and LAN in a centralized manner
- Data and voice integration, supporting data multi-service development and VoIP function and can be expanded as IPPBX further
- Information and communication integration, supporting rich value-added application and network application monitoring

Product Features

- **Integrating wireless features**

WLAN supports the 802.11b/g standard and multi-SSID isolation, and provides the related access authentication and link encryption functions. It also supports 802.1X authentication, including Open System and Share Key link-layer authentication modes; WPA-PSK, WPA2-PSK, WEP; AES and TKIP encryption. WAN supports wireless 3G access, including TD-SCDMA, CDMA2000 and WCDMA and, meeting the application requirements of users for the wireless uplink active/standby link.

- **Integrating narrowband features**

MP1800 supports Ethernet cable and fiber access modes, and XDSL broadband access, and keeps V24/V35, E1/CE1, and ISDN narrowband access capabilities, meeting the application requirements of users for narrowband backup link, adapting the transition of carrier access lines, and providing the economical access choice for users. With the USB port, 3G USB modem can be connected to realize the wireless uplink of the enterprise customers.

- **Integrating security features**

MP1800 provides the solutions of integrating data and security for middle/small enterprises and the security functions are inbuilt in the whole network, including firewall, HTTPS, PKI, AAA, SSH, attack proof, content filtering, application identifying, traffic analysis and control, network-surf management, security access control and so on. It supports IPSec VPN, MPLS VPN, L2TP, and GRE tunnel technologies, the port security, 802.1X, IPSOURCE GUARD, DHCP, SNOOPING, and ARP dynamic detection of the switching port; the wireless function supports access authentication and link encryption.

- **Integrating switching features**

MP1800 supports rich switching module functions, including VLAN, MSTP, 802.1X, 802.1P, IGMP Snooping, port mirroring, port isolation, storm suppression and so on, meeting the requirements of the middle/small enterprises for the network with routing and switching at one station. Moreover, the switching port can switch to the WAN Ethernet port flexibly as desired. WAN Ethernet port also can support rich telecom-level Ethernet features.

- **Integrating VoIP features**

MP1800 supports voice interface and VoIP functions and provides H.323 and SIP clients; NAT supports SIP, H.323 ALG functions; can be expanded as IP PBX so that carriers can open the fixed voice services and develop the full-service space during the broadband access.

- **Integrating multi-service features**

The complete QoS and HQF features of routing, switching and wireless modules ensure the multi-service reliable control; support the development of the carrier IPTV and video monitoring service, providing the endless imagination space for the carriers to develop the ICT market of the middle/small enterprises.

- **Various management and maintenance functions**

MP1800 supports command line, SNMP, TR069, and WEB management modes. Each management mode can provide the local, remote and centralized maintenance methods, and the grading management mechanism; can provide the interconnecting support based on SNMP or TR069 network management platform according to the carriers' demand. The WEB management supports the HTTPS encryption mode and provides the grading management authority management of different users. The perfect alarming, test, diagnosis, tracking and log functions can realize the locatable and traceable action auditing, strengthening the monitoring for the actions of the internal network.

Specifications

Item	Description									
Product Model	RM1800-21-AC	RM1800-22-AC	RM1800-23-AC	RM1800-31-AC	RM1800-31W-AC	RM1800-31W-DC48	RM1800-35-AC	RM1800-35W-AC	RM1800-36-AC	RM1800-36W-AC
Console port	1	1	1	1	1	1	1	1	1	1
WAN Ethernet ports	1xFE	2xFE	2xFE	2xFE	2xFE	2xFE	2xFE	2xFE	2xFE (optical)	2xFE (Optical)
LAN Ethernet ports	4xFE	4xFE	0	8xFE	8xFE	8xFE	4xGE	4xGE	4xGE	4xGE
USB ports	0	1	1	1	1	1	1	1	1	1
WLAN	0	0	0	0	1	1	0	1	0	1
RM2 slots	3	3	3	3	3	3	3	3	3	3
RM2 module	Slot 1: 1STA, 8AX, 1/2VoS, 1/2VoP, 4S10, 1SAE, 1E1, 1CE1 Slot 2: 1STA, 8AX, 1/2VoS, 1/2VoP, 4S10, 1SAE, ADSL, SHDSL Slot 3: 1STA, 8AX, 1/2VoS, 1/2VoP, 4S10, 3G									
Power supply	AC	AC	AC	AC	AC	DC48	AC	AC	AC	AC
Host power consumption	36W			47W			53W			
Throughput	>=120Kpps									
Processor	High-speed RISC processor									
Flash	32 MB									
Memory	256 MB									
Dimension	340 x 260 x 43.8 mm			340 x 300 x 43.8 mm			340 x 260 x 43.8 mm			
Environment parameters										
Working temperature	0-40°C									
Working humidity	10-90%, no-condensing									
Standards & Protocols										
WLAN protocols	IEEE 802.11/802.11b/802.11g, WPA-PSK, WPA-EAP,TKIP, 64/128-bit WEP									
3G wireless	WCDMA, CDMA2000, CDMA 1x, GRPS, EDGE, TD-SCDMA									
ADSL2+	ITU G.994, G.992.1, G.992.2, G.992.3 (ADSL2), G.992.5 (ADSL2+)									
G.SHDSL	ITU G.991.2 (G.SHDSL/G.SHDSL.bis)									

Link protocols	PPP, SLIP, FR, X.25, HDLC, LAPB, 802.1Q, 802.1X, IP SOURCE GUARD, DHCP SNOOPING, ARP dynamic detection
Network protocol	TCP/IP, ICMP, UDP, FTP, TFTP, SNMP, TELNET, DHCP, HTTP, DNS, ARP, DLSw, DDR
Routing protocol	Static route, RIPv1, RIPv2, OSPF, BGP, NDSP, IRMP, SNSP, IGMP, DVMRP, PIM-SM/DM
Network security	PPP encryption, L2TP, GRE, policy route, AAA, IPSec, IKE, PKI, CA, MPLSVPN, NAPT, ALG, SSH, SNMP V3, HTTPS, ACL, application identification, anti-DDOS attack, anti-ARP attack
VoIP	SIP 2.0, H.323 V4, RTP/RTCP, RTP compression, T.38/T.30, G.711A, G.729, G.723.1(6.3K)
QoS	FIFO, PQ, CQ, FQ, WFQ, CBWFQ, LLQ, CAR, SPD, WRED, flow shape, MPLS QOS, ATM QOS, 802.1P, flexible bandwidth control
Network management	SHELL, SNMPV1/V2/V3, TR069, WEB

Order Information

Host model	Description
RM1800-21-AC	MP1800 series router, one 10M/100M WAN port, four 10M/100M LAN ports, three RM2 slots, one Console port, 32M FLASH, 256M memory, AC power supply
RM1800-22-AC	MP1800 series router, one USB interface, two 10M/100M WAN ports, four 10M/100M LAN ports, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-23-AC	MP1800 series router, one USB interface, two 10M/100M WAN ports, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-31-AC	MP1800 series router, one USB interface, two 10M/100M WAN ports, eight 10M/100M LAN ports, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-31W-AC	MP1800 series router, one USB interface, two 10M/100M WAN ports, eight 10M/100M LAN ports, one WLAN module, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-31W-DC48	MP1800 series router, one USB interface, two 10M/100M WAN ports, eight 10M/100M LAN ports, one WLAN module, three RM2 slots, one console port, 32M FLASH, 256M memory, DC power supply
RM1800-35-AC	MP1800 series router, one USB interface, two 10M/100M WAN ports, four 100M/1000M LAN ports, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-35W-AC	MP1800 series router, one USB interface, two 10M/100M WAN ports, four 100M/1000M LAN ports, one WLAN module, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-36-AC	MP1800 series router, one USB interface, two 100M optical WAN ports (the SFP module needs to be configured), four 100M/1000M LAN ports, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
RM1800-36W-AC	MP1800 series router, one USB interface, two 100M optical WAN ports (the SFP module needs to be configured), four 100M/1000M LAN ports, one WLAN module, three RM2 slots, one console port, 32M FLASH, 256M memory, AC power supply
Multi-functional module	
Module name	Description
RM2-1SAE	One-port high-speed sync/async serial module (suitable for slot 1/2)
RM2-1CE1	One-port channelized E1 module(suitable for slot 1)
RM2-1E1	One-port non-channelized E1 module(suitable for slot 1)
RM2-1STA	One-port ISDN S/T module (suitable for slot 1/2/3)
RM2-8AX	8-port asynchronous module(suitable for slot 1/2/3)
RM2-1VOP	One-port FXS module (suitable for slot 1/2/3)
RM2-2VOP	Two-port FXS module (suitable for slot 1/2/3)
RM2-1VOS	One -port FXO module (suitable for slot 1/2/3)
RM2-2VOS	Two-port FXO module (suitable for slot 1/2/3)
RM2-4S10	Four-port FXS and single-port FXO module (suitable for slot 1/2/3; the FXS0 and the FXO port are multiplexed on one port, but it can only serve as FXS0 or FXO at one time)

RM2-1ADSL	Single-port ADSL module (support ADSL2+; suitable for slot 2; if the module is inserted, FE1 port is unavailable; the module cannot be used on MP1800-36 or MP1800-36W)
RM2-2SHDSL	2-pair wire G.SHDSL.bis module (suitable for slot 2; if the module is inserted, FE1 port is unavailable; the module cannot be used on MP1800-36 or MP1800-36W)
RM2-4SHDSL	4-pair wire G.SHDSL.bis module (suitable for slot 2; if the module is inserted, FE1 port is unavailable; the module cannot be used on MP1800-36 or MP1800-36W)
RM2-3G-CDMA	CDMA2000 1xEV-DO Rel A/CDMA2000 1xEV-DO Rel 0/ CDMA2000 1xRTT version 3G access module (suitable for slot 3; the module cannot be used on MP1800-21)
RM2-3G-GSM	WCDMA HSDPA/UTMS/EDGE/GPRS version 3G access module (suitable for slot 3; the module cannot be used on MP1800-21)
RM2-3G-TD	TD- HSDPA version 3G access module (suitable for slot 3; the module cannot be used on MP1800-21)