# MP1800X-50 Series MPLS Edge Router Datasheet

Overview

MP1800X-50 series MPLS edge router developed by Maipu is one new-generation enterprise-class MPLS edge router, applicable to enterprise and government branch offices. It integrates various modern network technologies, such as routing, switching, QoS, security, provide the flexible access modes and secure and high-efficiency service experience for the users.

MP1800X-50 series MPLS edge router is the next generation version of MP801E&MP1700E series which was widely deployed in many countries. It includes two models which are MP1800X-50 and MP1800X-51.
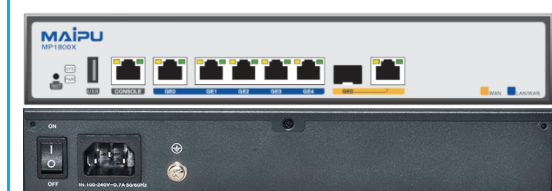
MP1800X-50 supports One RJ 45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, 220V AC power input.

MP1800X-51 supports One RJ 45 Console port, one USB interface, one 1000M Ethernet Combo Ports and five 10M/100M/1000M Ethernet ports, 220V AC power input.
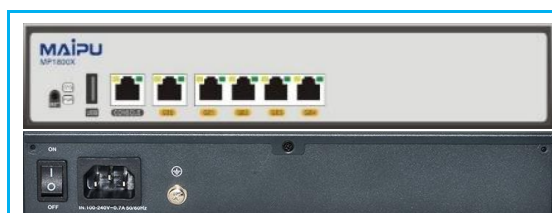
MP1800X-50	● Fixed Ports: 5*GE RJ45(Can be configured as WAN or LAN) ● 1*RJ45 console port ● 1*USB2.0 ● 1*AC power, 100V-220V 50-60Hz. ● Dimension (L*D*H): 260mm*190*44mm(1U)
MP1800X-51	● Fixed Ports: 5*GE RJ45(Can be configured as WAN or LAN), 1*GE combo (RJ45/SFP) WAN port. ● 1*RJ45 console port ● 1*USB2.0 ● 1*AC power, 100V-220V 50-60Hz. ● Dimension (L*D*H): 260mm*190*44mm(1U)

Highlights

| Highlights	Benefits
High performance	• Multi-core high performance processor. • 10/100/1000M Base-T high-speed ethernet port.
Rich Software	MP1800X-50 series router provides rich software features; supports various application technologies, such as 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.
Flexible deployment	• Support multiple WAN protocol: DDR, PPPoE, EDP, DHCP, Static, 4G/3G • Support advanced protocol, such as BGP, MPLS, VPLS. • IPv6 Ready, fully support IPv6 features.
High reliability	• Provide multiple link backup to ensure connectivity. • Fault detection in milliseconds, and support auto roll back.
Easy O&M	Multiple management methods: standard SNMP monitoring and management, Web-based GUI, cloud based management, traditional command line interface.
Service convergence	Integration of functions such as routing, switching, security, firewall, simplifying networking deployment.
Security	Built-in firewall features, stateful firewall, IPS, URL Filtering, VPN access.
ZTP	Zero-Touch (USB, DHCP, EDP…), easy for installation and configuration.

Product Specifications

Hardware specification	MP1800X-50	MP1800X-51
CPU	1GHz Dual Core	1GHz Dual Core
Memory	1G	512M
Flash	128M	128M
Dual IOS	Yes	Yes
Fixed interface	5*GE RJ45 (Can be configured as WAN or LAN)	1*GE combo (RJ45/SFP) WAN port. 5*GE RJ45 (Can be configured as WAN or LAN)
USB	1*USB2.0	1*USB2.0
Console port	1*RJ45 console port.	1*RJ45 console port.
Dimension (L*D*H)	260mm*190*44mm(1U)	260mm*190*44mm(1U)
Power	1*AC power, 100V-220V 50-60Hz	1*AC power, 100V-220V 50-60Hz
Power consumption	≤20W	≤20W
IP Security Level	IP30	IP30
Working Temperature	0°C～45°C	0°C～45°C
Humidity	Work humidity: 5%-85%/RH	Work humidity: 5%-85%/RH
Weight	≤2KG	≤2KG

| Software features	
WAN Protocol	DDR, NDIS, PPPoE, Bridge Group, EDP
LAN Protocol	STP/RSTP/MSTP, MAC management, 802.1q VLAN, LACP, Loopback Detection, SPAN, LLDP, Port-isolate, Error-disable, ULFD, Port Security
TCP/IP Protocol	DHCP, DNS, DDNS, NAT, NAT64, NAT66, NAT ALG, IPIP, GRE, L2TP/L2TPv3
IPv4 Routing protocol	Static, RIP, OSPFv2, IS-IS, BGP, Policy Routing
IPv6 Routing Protocol	IPv6 Static, RIPng, OSPFv3, IS-ISv6, BGP4+, IPv6 Policy Routing
IPv6 function	IPv4/IPv6 Dual-Stack, IPv6 ND, IPv6 PMTU, IPv6 ACL, ICMPv6, DNSv6, DHCPv6, GREv6
IPv6 Transition Tunneling	IPv6 over IPv4, 6to4, ISATAP
Multicast	IGMP v1/v2/v3, PIM-DM/PIM-SM, SSM, MVPN, NG MVPN, MSDP, MLD, IPv6 PIM, MBGP
VPN	IPSec, PKI, MPLS, VPLS, VPWS, L3VPN, OAM, 6PE, VRF, DVPN, VxLAN
MPLS	LDP, MPLS L3VPN, MPLS L2VPN, MPLST TE, IP FRR, LDP FRR, TE FRR
Security	ACL, SSH, CPU protection, Firewall, IPS, URL Filter, AAA, IKE, PKI, 802.1X, URFP
QoS	FIFO, PQ, FQ, WFQ, CBWFQ, LLQ, RSVP, CAR, H-QoS, traffic shaping, Rate Limitation
Reliability	Backup interface, VRRP/VRRPv3, VBRP, IPSLA, Track, BFD/BFDv6
Automation	ZTP, Netconf
Management & Monitoring	Keepalive, NTP, EEP, RMON, CWMP, CLI, SSH, HTTP/HTTPS, SNMP V1/V2/V3, Telnet, PING, Trace Route, Login, FTP, TFTP, SFTP, TR069, IP-SLA, Telemetry, IPFIX

Application Scenario

Enterprise WAN Solution

Maipu can provide total solution of enterprise WAN network, MP1800X/1900X/2900X series access router is working at enterprise branch offices and supporting multiple physical links, such as MPLS links, Internet links, and 5G/4G mobile network links. MP3900X/MP7300X/MP7500X series aggregation router is working at enterprise HQ. Maipu Matrix View is SNMP centralized managed platform.
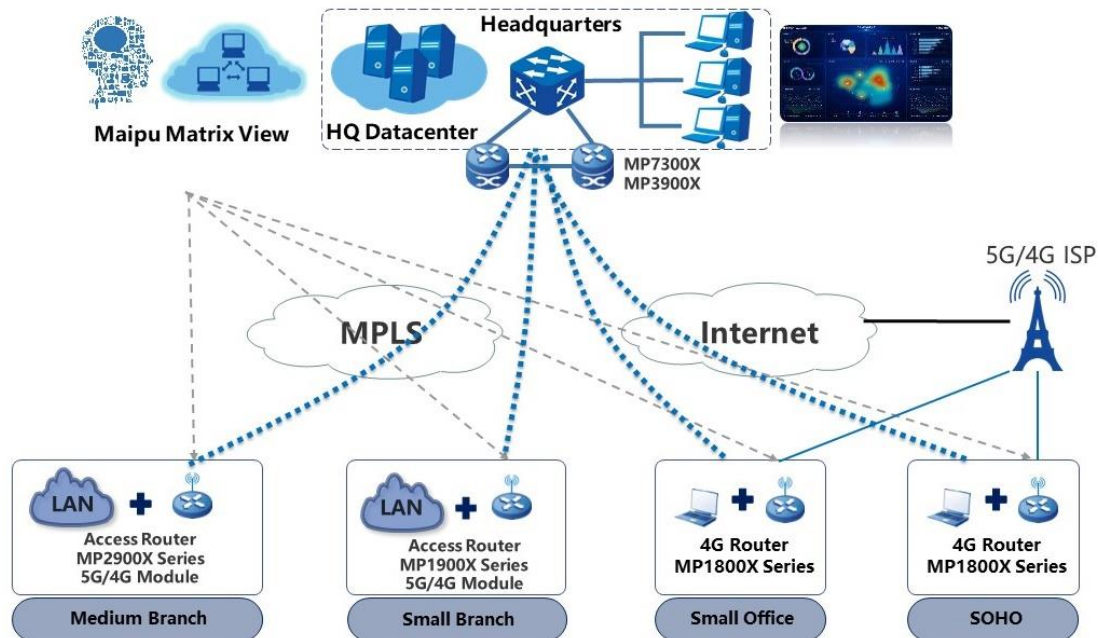

Telecom Managed Service

In this scenario, Maipu MP1800X/1900X/2900X series routers are used as enterprise branches egresses and provide flexible WAN access, to support SDH, MPLS, Metro-E, and 5G/4G links, helping the customer reduce the OPEX, CAPEX and improve customer's network experience.
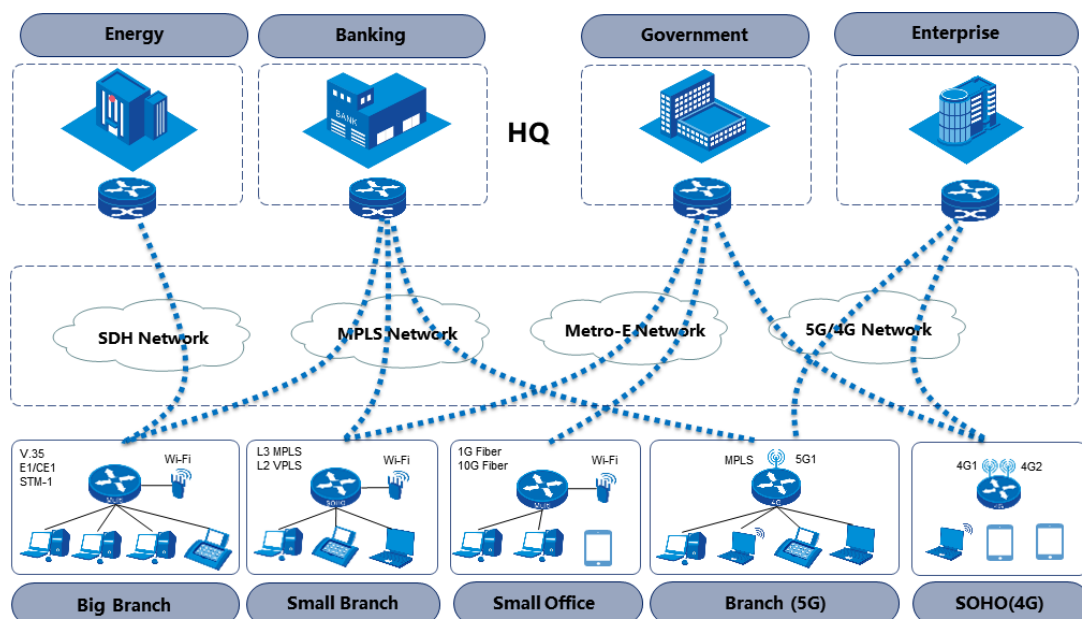
Enterprise VPN Solution

Maipu MP1800X/1900X/2900X series provide various VPN access functions for communication between branches and headquarters over multiple physical links. Secure tunnels such as GRE, L2TP, IPSec, and DVPN tunnels can be set up between the HQ and branches for secure data access and transmission.
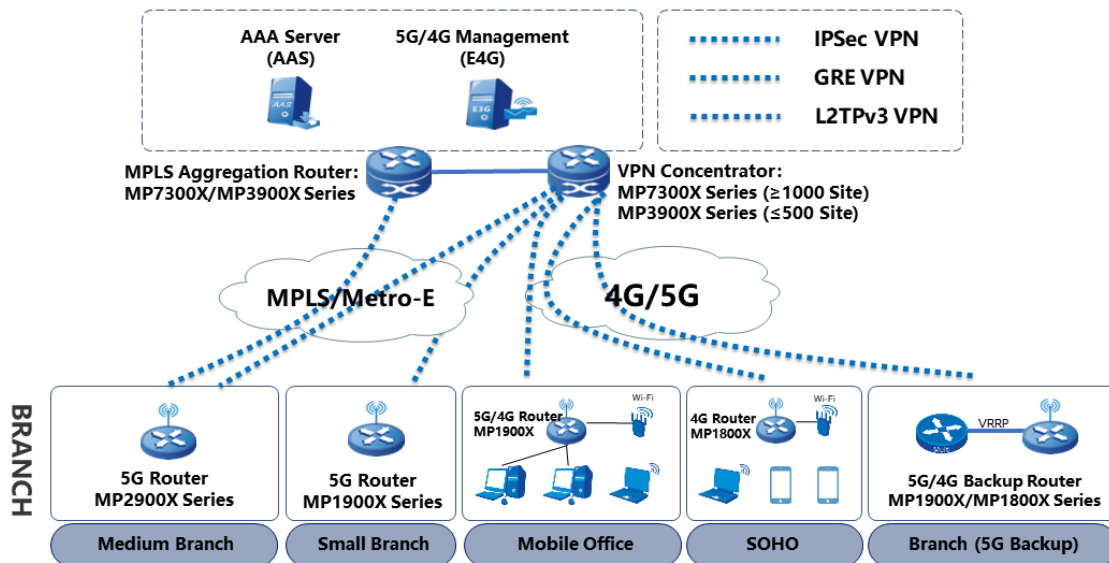
Order Information

Host model	Description
MP1800X-50	Five 100/1000M Ethernet ports, One USB interface, AC power supply.
MP1800X-51	One 1000M Ethernet Combo Port and Five 100/1000M Ethernet ports, One USB interface, AC power supply.

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