MP1800X-40 Series LTE Edge Router Datasheet

Overview

MP1800X-40 Series router developed by Maipu is one new-generation enterprise-class LTE edge router, applicable to enterprise and government branch offices. 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.

MP1800X-40 series router upgrades all the interfaces from megabit to gigabit, it supports up 5*100/1000M Ethernet ports which can be configured as WAN or LAN, providing the high-speed terminal access capability, and meeting the requirement of the user for integrating the routing and switch to construct the access network.

MP1800X-40 Series 3G/4G interface and Ethernet ports can back up for each other. 3G/4G and Ethernet WAN ports both can serve as the master port. Ethernet WAN port supports static address, DHCP, and PPPOE access modes. The master/standby switching supports the failover is based on the link status and peer track IP.

MP1800X-40 Series is the next-generation version of MP801E&MP1800 series which was widely deployed in many countries. It includes three models which are MP1800X-40, MP1800X-40W and MP1800X-40E.

MP1800X-40 supports One RJ 45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, dual SIM slots and single 3G/4G modem, 12V DC power input.

MP1800X-40W supports One RJ 45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, dual SIM slots and single 3G/4G modem, 802.11n Wi-Fi enable, 12V DC power input.

MP1800X-40E supports One RJ 45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, dual SIM slots and Dual 3G/4G modem, 12V DC power input.
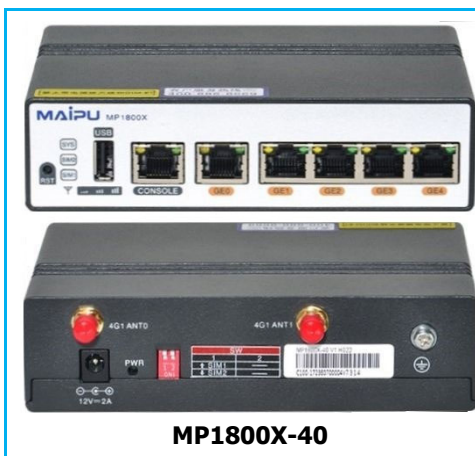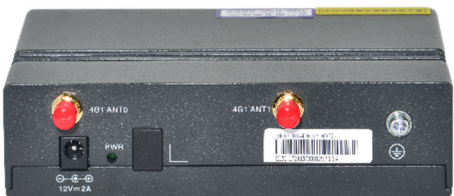

MP1800X-40

- Fixed Ports: 5*GE copper RJ45 (Can be configured as WAN or LAN)
- SIM Slots: 2
- Modem: 1
- 4G LTE Band: 1/3/5/7/8/20/40
- 3G UMTS Band: 1/5/8
- Dimension (L*D*H): 145mm*100mm*38mm
- Power: 1*external AC adaptor, DC 12V input.
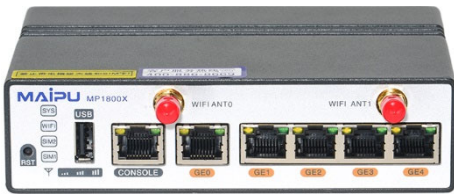
MP1800X-40W

- Fixed Ports: 5*GE copper RJ45(Can be configured as WAN or LAN)
- SIM Slots: 2
- Modem: 1
- 4G LTE Band: 1/3/5/7/8/20/40
- 3G UMTS Band: 1/5/8
- Wi-Fi: 2.4GHz 802.11 b/g/n
- Dimension (L*D*H): 145mm*100mm*38mm
- Power: 1*external AC adaptor, DC 12V input.

MP1800X-40E

- Fixed Ports: 5*GE copper RJ45 (Can be configured as WAN or LAN)
- SIM Slots: 2
- Modem: 2
- 4G LTE Band: 1/3/5/7/8/20/40
- 3G UMTS Band: 1/5/8
- Dimension (L*D*H): 145mm*100mm*38mm
- Power: 1*external AC adaptor, DC 12V input.

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Highlights

| Highlights	Benefits
High performance	• Multi-core high performance processor. • 10/100/1000M Base-T high-speed ethernet port.
Reliable Hardware	• Widely working temperature, up to 60°C. • Fanless and Fin heat dissipation design. • Metal shell and IP30 protection.
Flexible deployment	• Support multiple WAN protocol: DDR, PPPoE, EDP, DHCP, Static, 4G/3G • Small Dimension easy to install and deploy. • 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.
4G LTE Access	• In-built one or two 4G modems, easy for installation. • Support dual SIM card in all models. • Support SIM card backup and SIM card auto switchover. • Support Active-Active working mode. (MP1800X-40E only)
Easy O&M	Multiple management methods: standard SNMP monitoring and management, Web-based GUI, SD-WAN 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 IPS, URL Filtering, DPI, Complete VPN access.
ZTP	Zero-Touch (USB, DHCP, EDP…), easy for installation and configuration.

Product Specifications

Hardware specification	MP1800X-40	MP1800X-40W	MP1800X-40E
CPU	1GHz Dual Core	1GHz Dual Core	1GHz Dual Core
Memory (Default)	512M	512M	512M
Flash (Default)	128M	128M	128M
Dual IOS	Yes	Yes	Yes
Fixed interface	5 GE RJ45 (WAN or LAN)	5 GE RJ45 (WAN or LAN)	5 GE RJ45 (WAN or LAN)
3G/4G	Dual SIM slots and single modem support TD-LTE, FDD-LTE, WCDMA, GSM	Dual SIM slots and single modem support TD-LTE, FDD-LTE, WCDMA, GSM	Dual SIM slots and dual modem support TD-LTE, FDD-LTE, WCDMA, GSM
WIFI	N/A	2.4GHz	N/A
USB	1	1	1
Console port/AUX	1	1	1
Antenna interface	2 SMA interfaces	4 SMA interfaces	4 SMA interfaces
4G Signal Strength LED	Support	Support	Support
Dimension (L*D*H)	145mm*100mm*38mm	145mm*100mm*38mm	145mm*100mm*38mm
Power supply	12V DC input	12V DC input	12V DC input
Power consumption	≤20W	≤20W	≤20W
IP Security Level	IP30	IP30	IP30
Working Temperature	-20°C～60°C	-20°C～60°C	-20°C～60°C
Humidity	Work humidity: 5%-85%/RH	Work humidity: 5%-85%/RH	Work humidity: 5%-85%/RH
Weight	≤1KG	≤1KG	≤1KG

Certification and Compliance Standard	
Certifications	CCC, CE, RoHS
Safety Compliance	EN62368-1
RF Health Compliance	EN62311
EMC Compliance	ETSI EN 301 489-1 ETSI EN 301 489-17 ETSI EN 301 489-52 EN 55032 EN 55035 EN IEC 61000-3-2 EN 61000-3-3
Radio Compliance	ETSI EN 300 328 ETSI EN 301 511 ETSI EN 301 908-1 ETSI EN 301 908-2 ETSI EN 301 908-13
Environmental Compliance	EN 62321

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| Software features	
4G LTE	SIM Lock, SIM Switch, 4G Band lock, Auto-recovery, multi-APN profile, SMS
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
Wi-Fi	802.11b/g/n, multiple SSID, SSID Broadcast, Open/WPA/WPA2(Only for MP1800X-40W)
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
SDN Ready	ZTP, IPFIX, Telemetry, 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

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.
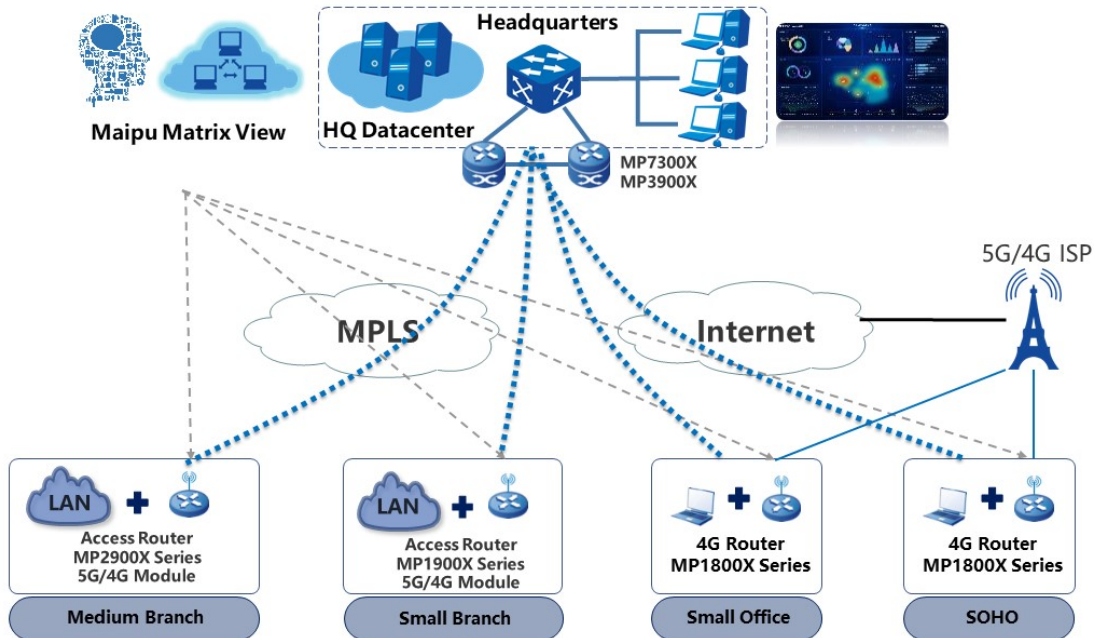

Telecom Managed Service

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.
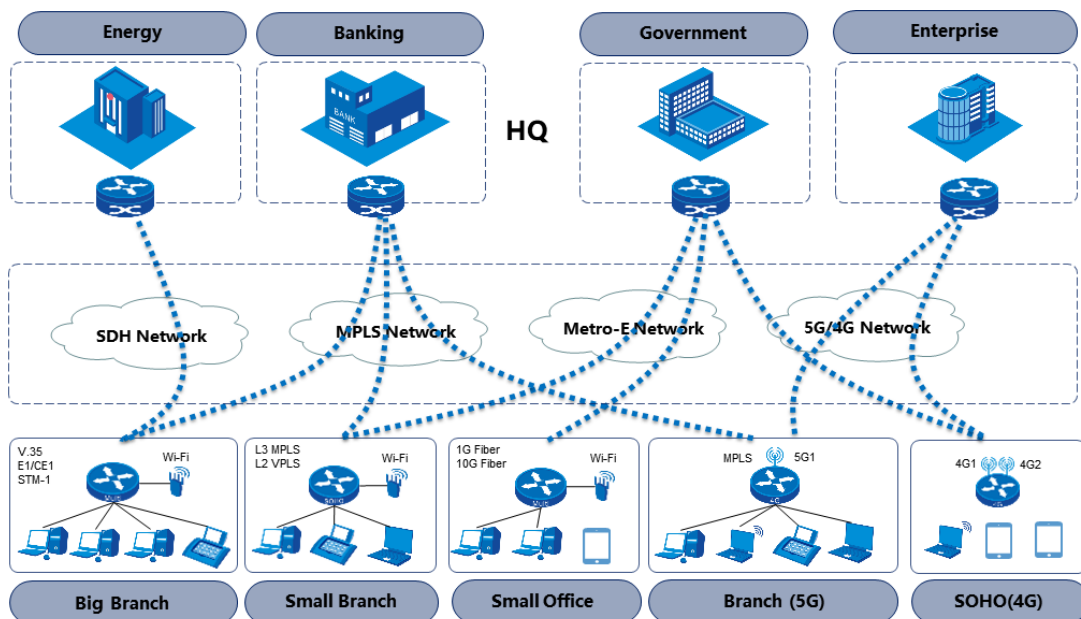
Enterprise VPN Solution

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.
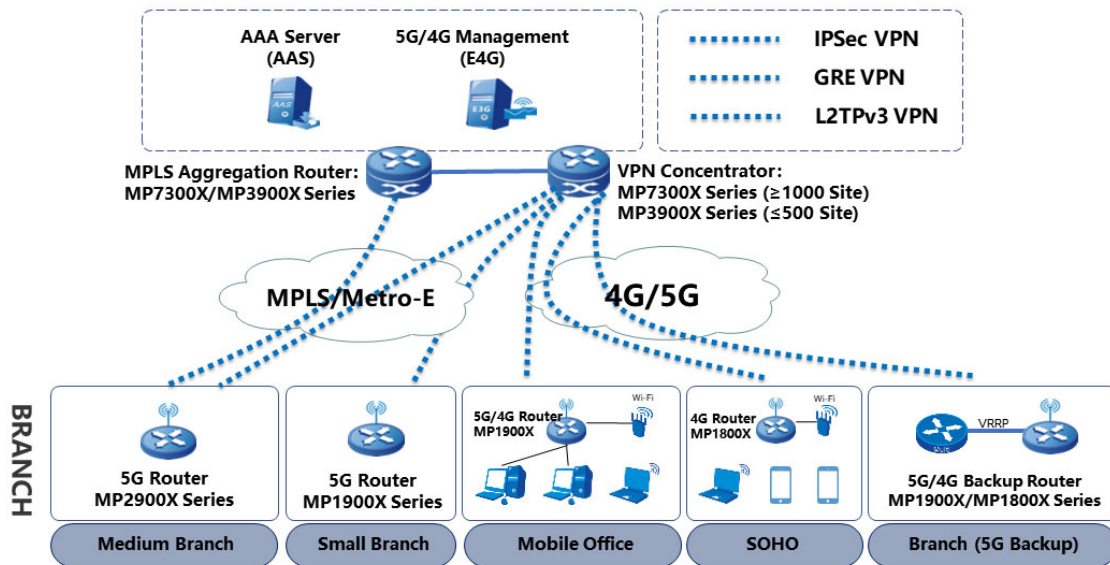
Order Information

Host model	Description
MP1800X-40	One RJ45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, support TD-LTE, FDD-LTE, WCDMA, GSM, dual SIM slots and single modem, DC power supply
MP1800X-40W	One RJ 45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, support TD-LTE, FDD-LTE, WCDMA, GSM, support WIFI (IEEE 802.11b/g/n), dual SIM slots and single modem, DC power supply
MP1800X-40E	One RJ 45 Console port, one USB interface, five 10M/100M/1000M Ethernet ports, support TD-LTE, FDD-LTE, WCDMA, GSM, dual SIM slots and dual modem, DC power supply
Antenna	
ANT-NQFX-PS02-01	3G/4G Antenna, 699-2700MHz, Connector: SMA Male, Length:1.5m
ANT-NQFX-PS02-03	3G/4G Antenna, 699-2700MHz, Connector: SMA Male, Length:3.0m
Power Adaptor	
AD24-1S5N	Input: AC 100V-240V, Output:12V/2A, length:1.5m, India Standard
AD24-1S4N	Input: AC 100V-240V, Output:12V/2A, length:1.5m, UK Standard
AD24-1S3N	Input: AC 100V-240V, Output:12V/2A, length:1.5m, Europe Standard
AD24-1S2N	Input: AC 100V-240V, Output:12V/2A, length:1.5m, American Standard