

MIR785-W

Dual Band Gigabit Wi-Fi 6 Industrial Grade 5G Router



- ◆ Support 4 wired LAN ports, 1 wired WAN port, all support 10/100/1000Mbps rate;
- ◆ Support 2.4GHz and 5.8GHz dual-band Wi-Fi, and both support the new generation Wi-Fi 6 standard;
- ◆ Support OFDMA+MU-MIMO technology, support NSA and SA dual-mode 5G networks, backward compatible with 4G and 3G;
- ◆ 5G communication module supporting M.2 interface, which is convenient for customers to replace by themselves;
- ◆ Supports transparent data transmission from RS485 and RS232 serial ports to the network;
- ◆ Support a new generation of peanut shell intranet penetration and dynamic domain name resolution DDNS;
- ◆ Support multiple VPN virtual private network protocols, and support VPN encryption function;
- ◆ Adopt openwrt open architecture to support secondary development of users;
- ◆ Python is supported, USB2.0 interface is reserved, external USB storage is possible, and edge computing is supported.



RoHS



IP40

Product Introduction

MIR785-W is a dual-band Gigabit Wi-Fi 6 industrial-grade 5G router, with dual-band concurrent rate up to 1775Mbps, faster wireless rate, longer transmission distance, and supports NSA and SA dual-mode 5G networks, and supports 1-way RS232 Interface, 1-way RS485 interface and 5-way Gigabit Ethernet interface, which can realize mutual transparent transmission between RS232/485, cellular data and Ethernet, providing a convenient and fast networking solution for user equipment. At the same time, it also supports wired and wireless multi-network online at the same time, multi-network intelligent switching and backup functions, etc., making industrial communication smoother, more reliable, and faster. This product adopts the openwrt open architecture, supports secondary development of users, and meets the needs of customers for continuous innovation to improve value-added applications.

MIR785-W provides a wide range of DC power input. In terms of structural installation, MIR785 series industrial wireless routers use wall-mounted installation or desktop installation; on the core components, the products adopt industrial-grade quality design solutions, with APN automatic network inspection, automatic network standard switching, SIM card information display, and instant connection. It can be used for remote onsite data acquisition, remote monitoring, on-site control, etc., and is an indispensable industrial communication product for the development of the Industrial Internet of Things. At the same time, it provides a wireless long-distance fast networking solution for user equipment. Parameters can be set through the built-in web page to meet the application of power system, industrial monitoring, traffic management, meteorology, water treatment, environmental monitoring, financial securities, coal mine, petroleum and other industries.

Product Features

- ◆ Support 4 wired LAN ports, 1 wired WAN port, all support 10/100/1000Mbps rate;
- ◆ Support 2.4GHz and 5.8GHz dual-band Wi-Fi, and both support the new generation Wi-Fi 6 standard;
- ◆ Support OFDMA+MU-MIMO technology, support NSA and SA dual-mode 5G networks, backward compatible with 4G and 3G;
- ◆ Support LED status monitoring (display power, Run, Wi-Fi, 5G network connection status and signal strength status, WAN port connection, LAN port connection, UART serial data transmission);
- ◆ Supports transparent data transmission from two serial ports, RS485 and RS232, to the network;
- ◆ Support network management software, Web multi-platform management and configuration methods;
- ◆ Support one-key restart and factory reset function;
- ◆ Support APN automatic network detection, automatic network mode switching, SIM card information display, support APN special network card;
- ◆ Support wired and wireless multi-network online at the same time, multi-network intelligent switching backup function;
- ◆ Support static routing, PPPoE, DHCP, static IP function;
- ◆ Support firewall, NAT, DMZ host, black and white list of access control, IP speed limit, MAC speed limit;
- ◆ Support NTP network automatic time calibration, support SNMP protocol and network management platform, support LLDP link discovery protocol;
- ◆ Support WAN/LAN mode switching (routing mode 1WAN+4LAN or bridge mode 5LAN);
- ◆ Support a new generation of peanut shell intranet penetration and dynamic domain name resolution DDNS;
- ◆ Support multiple VPN virtual private network protocols (PPTP, L2TP, GRE, OpenVPN, IPSec), and support VPN encryption function;
- ◆ Adopt openwrt open architecture to support secondary development of users;
- ◆ Support GPS and Beidou satellite positioning functions.

Product Specifications

| Network | |
|------------------------------|--|
| Antenna | 4pcs |
| Antenna interface | SMA interface (external screw and inner hole) |
| SIM card (dual card) voltage | 3V, 1.8V Size: Standard large card(small card can be purchased in a card case) |
| Number of SIM cards | Dual-card single standby |
| Serial Port | |
| Serial data port (5Pin) | 1 RS232+1 RS485 |
| Serial data rate | 300~230400bps |

| Network Port | |
|---|--|
| Ethernet port type | RJ45 |
| Isolation protection | 1.5kV |
| Crossover direct connection automatic switching | Support |
| LAN interface | 4x10/100/1000Mbps adaptive Ethernet port |
| WAN interface | 1x10/100/1000Mbps adaptive Ethernet port, WAN/LAN switchable |
| Wi-Fi | |
| Wireless standard | Wi-Fi 6 6th generation wireless network technology 2.4GHz 802.11b/g/n/ax, 5.8GHz 802.11a/n/ac/ax |
| Antennas | 2 |
| Antenna interface | SMA interface (external screw and inner hole) |
| Theoretical WiFi rate | 2.4GHz: 574Mbps, 5GHz: 1201Mbps |
| Power | |
| Power supply | 9V~36V |
| Working current | 878mA@12V |
| Power interface | DC power socket, terminal power supply |
| Power protection | Anti-surge, ESD protection, anti-reverse connection |
| Environment | |
| Working Temperature | -40℃~75℃ |
| Storage Temperature | -40~85℃/5%~95% RH |
| Appearance | |
| Size | 185.0×112.0×33.0mm(L*W*H) |
| Wireless | |
| Network Mode | 5G/4G/3G |
| Transmission Rate | 5G SA Sub-6 :DL 2.1 Gbps/UL 900 Mbps 5G NSA Sub-6 :DL 2.5 Gbps/UL 650 Mbps LTE:DL 1.0 Gbps/UL 200 Mbps WCDMA:DL 42 Mbps/UL 5.76 Mbps |
| Working Frequency | 5G NR NSA :n41/n77/n78/n79 5G NR SA*:n1/n2/n3/n5/n7/n8/ n12/n20/n25/n28/n38/n40/n41/n48/n66/n71/n77/n78/n79 LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 LTE-TDD :B34/B38/39/B40/B41/B42/B43/B48LAA B46 WCDMA: B1/B2/B3/B4/B5/B6/B8/B19 MIMO DL: 4 x4, UL: 2 x2 GNSS: GPS/GLONASS/BeiDou (Compass)/Galileo |

| Software | |
|--------------------|--|
| User Configuration | Web |
| Software | <p>Support domain name resolution DNS, support operator private network APN; Wi-Fi signal supports WPA/WPA2, WEP and other encryption methods; Port mapping function, traffic speed limit function, support QoS; DHCP, static routing, PPPoE, static IP function; Support serial port to network transparent transmission; Support TCP Server/TCP Client/UDP Server/UDP Client and other transmission protocols;</p> <p>Network diagnosis function: Support Ping, Traceroute and Tcpdump (network packet capture tool), etc. Support Web upgrade, support local system log, remote log, local log timing saving, etc. Support wired and wireless multi-network online at the same time, link backup, dual-mode backup , wired and wireless backup and other functions;</p> <p>Watchdog function, automatic detection of network disconnection, automatic restart after dialing failure, one-key restore to factory default configuration; Support immediate restart and timed restart functions;</p> <p>Support dynamic DNS domain name mapping, support the new generation of peanut shell intranet penetration function;</p> <p>Support VPN Client (PPTP/L2TP/OPENVPN/GRE/SSTP/IPSEC); Support VPN Server (PPTP/L2TP/IPSEC); Support LLDP protocol, SNMP protocol and network management platform; Support GPS and Beidou positioning function</p> |

Installation Size

