MIR682

2-Port Wall-Mount 5G industrial Router

- 1*100M WAN port, 1*100M LAN port, 1*RS232/485 serial port, 4*5G antenna interfaces, 2*SIM card slots and 1*USB
- Support 5G/4G/3G cellular wireless network and WAN port wired network backup
- Support serial port terminal device networking, can convert UDP, TCP, Modbus, HTTPD, WebSocket, MQTT and other protocols, and supports virtual serial port
- Support firewall and service functions such as port mapping, DMZ, IP/MAC/domain name filtering, DDNS, VPN, SNMP, LLDP, etc.
- Support DC9~36V power input, support anti-reverse connection
- High-strength metal casing, IP40 protection level, fanless casing for heat dissipation, the device can reliably work in harsh industrial environments of -40℃~+75℃

Product Description

MIR682 is a 2-port 100M wall-mounted 5G industrial router specially designed and developed for industrial communication network applications. It integrates serial port device networking and supports WAN wired or 5G cellular wireless networks. This product provides 1*100M WAN port, 1*100M LAN port, 1*RS232/485 serial port, 4*5G antenna interfaces and 1*USB interface, supports 1*DC9~36V power input, and adopts wall-mounted installation.

The product supports WEB configuration of various network management functions, such as WAN mode, PPPoE dial-up, DHCP server, 5G network standard, APN, IP/MAC binding, static routing, link check, network diagnosis, serial port to network, firewall, VPN, SNMP, LLDP, cloud services, NTP, etc.; the system provides user management with different permissions, supports local/remote log management, supports scheduled restart, configuration backup and recovery, firmware upgrade, and factory reset. Support one-click restart or factory reset. The hardware adopts high-standard industrial protection design, with selected industrial-grade components and high-strength metal casing, which is sturdy and durable; low power consumption, wide temperature design, fanless shell heat dissipation, supports -40℃~+75℃ operating temperature, and has passed strict Safety and EMC testing to meet the application requirements of harsh industrial environments. Products can be widely used in industrial automation, integrated energy, smart cities, smart transportation, smart mines, smart factories and other fields.

⬡ Features and Benefits

- Support 5G/4G/3G cellular wireless network and WAN port wired network, supports dual network backup
- Support MIMO (multiple input and multiple output) to increase data transmission rate, expand network capacity and wireless coverage, and reduce data packet loss
- The WAN port supports DHCP protocol, static address, PPPoE dial-up, etc. to connect to the external network, or can be used as a LAN port to connect to the intranet
- The LAN port supports DHCP server to centrally dynamically manage and configure user IP addresses
- The 5G network supports 5G NR NSA and SA dual-module networking, is compatible with 4G/3G, supports three networks, dual SIM single standby, and APN
- Support static routing, routing rules can be added manually to implement routing selection and packet forwarding
- Support link check, periodically check the 5G network link status and perform link recovery
- Support IPv4/IPv6 Ping, IPv4/IPv6 Traceroute, Nslookup, packet capture, and can perform network diagnosis or fault analysis
- The firewall supports SYN-flood defense, port mapping, IP/MAC/domain name filtering, iptables command custom rules, DMZ isolation zone, UPnP, IP/MAC speed limit, QoS limit upload/download rate and other functions
- Support NTP client and server functions, can perform clock synchronization or provide clock source
- Log information records multiple levels of kernel, application and network information, and supports local downloading, scheduled saving, and remote monitoring
- The serial port supports UDP, TCP Client/Server, UDP Multicast, Modbus RTU Master/Slave, Modbus ASCII Master/Slave, Realcom MCP/CCP/MW, Pair Connection Master/Slave, Httpd Client, WebSocket Client, MQTT and other serial port conversion modes
- Support dynamic DNS function, allowing remote login and management of devices through designated domain names
- Support VPN client and server to build a private network. The client supports tunnel protocols such as PPTP, L2TP, IPSec, OpenVPN, and GRE. The server supports protocols such as PPTP, L2TP, and IPSec
- Support SNMPv1/v2c, information query, information modification and troubleshooting can be carried out through MIB to achieve centralized management
- Support LLDP, obtains LLDP neighbor device information, and monitors link status to facilitate topology management and fault location
- Support Maiwe cloud platform management to realize remote management of equipment and monitoring of on-site network status

Specification

Software	
Network Management Function	Support traffic statistics, running status, network status, local address and other status information Support static address, DHCP, PPPoE external network connection, support WAN/LAN mode Support DHCP server, IP/MAC binding Support 4G network, dual-SIM management (some models), APN, link check Support wireless AP mode, Client mode, AP+Client mode Support static routing Support serial port to network, peanut shell intranet penetration, dynamic DNS, SNMP, LLDP, cloud services Support PPTP/L2TP/GRE/TUN/TAP protocol VPN client Support PPTP/L2TP/IPSec protocol VPN server
Firewalls	Support SYN-flood defense, IP dynamic camouflage, MSS clamping, inbound/outbound data control Support WAN/LAN port TCP/UDP port mapping Support IP/MAC/domain name filtering, scheduled tasks, DMZ, UPnP, IP/MAC/QoS rate limiting
System Management	Support IPv4/IPv6 Ping, IPv4/IPv6 Traceroute, Nslookup, and capture network packets Support time zone, NTP client/server, scheduled tasks, remote/local logs Support user rights management, SSH access Support online restart, scheduled restart, configuration backup/restore, firmware flash, and factory settings restore

5G Cellular Network	
Network Format	5G NR SA/NSA, LTE-FDD, LTE-TDD, WCDMA
Working Frequency	5G NR SA: n1/41/77/78/79 5G NR NSA: n41/78/79 LTE-FDD: B1/2/3/5/7/8/20/28 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/5/8
MIMO	DL 4×4：n1/41/77/78/79 UL 2×2：n41/77/78/79 DL 2×2: LTE
Maximum Transmission Rate (theoretical value)	5G SA Sub-6: DL 2Gbps/ UL 1Gbps 5G NSA Sub-6: DL 2.2Gbps/ UL 575Mbps LTE: DL 600Mbps/ UL 150Mbps UMTS (DC-HSDPA/HSUPA): DL 42.2Mbps/ UL 11Mbps WCDMA: DL/UL 384 kbps
Maximum Transmit Power	5G NR n1/41: 23dBm±2dB 5G NR n77/78/79: 23dBm+2/-3dB LTE: 23dBm±2dB WCDMA: 24dBm+1/-3dB

☑ Specification

|	
Receive Sensitivity	LTE-FDD: -96.3dBm(B1)/ -94.3dBm(B2)/ -93.3dBm(B3)/ -94.3dBm(B5/7)/ -93.3dBm(B8/20)/ -94.8dBm(B28) LTE-TDD: -96.3dBm(B34/38/39/40)/ -94.3dBm(B41) WCDMA: -106.7dBm(B1)/ -104.7dBm(B2/5)/ -103.7dBm(B8)
Interface	
100M WAN	1*10/100Base-T(X) auto-sensing 100M RJ45 WAN port (supports LAN mode), supports full/half duplex, auto MDI/MDI-X, and supports 1.5kV electromagnetic isolation
100M LAN	1*10/100Base-T(X) auto-sensing 100M RJ45 LAN port, supports full/half duplex, auto MDI/MDI-X, supports 1.5kV electromagnetic isolation
Serial Port	Serial port type: 1 channel RS232/485 Connection method: 5-position 3.81mm pitch terminal block, 5-position serial port Baud rate: 300bps-230400bps Data bits: 5bit, 6bit, 7bit, 8bit Stop bit: 1bit, 2bit Check digit: None, Odd, Even
Antenna Interface	4* SMA-K (external thread internal hole) antenna interface for connecting to 5G cellular antennas
SIM Card Slot	2*standard SIM card slot (1.8V / 3V), dual SIM card single standby, supports 5G/4G triple network, 3G China Unicom
USB	1 Type-A USB2.0 interface, expandable storage
Button	Restart or restore factory settings with one click
Status LEDs	Power indicator light, running indicator light, serial port indicator light, 5G indicator light, signal strength indicator light, electrical port speed and connection/activity indicator light
Power Supply	
Power Input	DC9~36V
Full Load Power Consumption	＜6.5W@DC24V
Connection Method	2-position 5.08mm pitch terminal block or Φ2.5mm DC round head
Physical Characteristics	
Dimensions	162×95×29 mm (mounting brackets included)
Installations	Wall mount
IP Code	IP40

Specification

Working Environment	
Operating Temp	-40℃~+75℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	
EMC	IEC 61000-4-2 (ESD): Level 2 IEC 61000-4-5 (Surge): Level 4 ※The network port supports 6kV lightning protection IEC 61000-4-4 (EFT): Level 4
Certification	CE, FCC, RoHS

Installation Dimension

Unit: mm
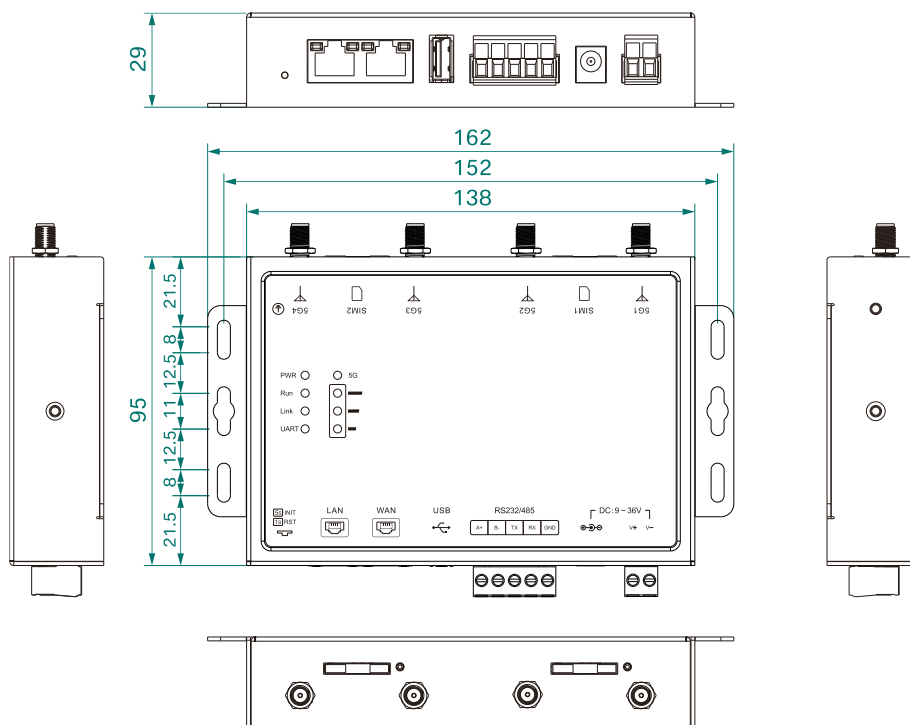
Maiwe

🛒 Ordering Information

Standard Model	100M WAN	100M LAN	RS232/485	5G Antenna Port	Input Voltage
MIR682	1	1	1	4	DC9~36V

📞 Contact Us

Wuhan Maiwe Communication Co., Ltd

Address: No.52 Liufang Avenue, East lake High-tech Development Zone, Wuhan, China.

Tel: 027-87170217

Mail: enquiry@maiwe.com

Official site: www.maiwe.com