## **MIR652-W**

#### 4G Wall Mount Industrial Wireless Router



- Support 1 100M WAN port, 1 100M LAN port, 1 RS232/485 serial port, 1 4G antenna interface, 2 2.4GHz antenna interfaces, 2 SIM card slots, and 1 USB interface
- Support 4G cellular wireless network and WAN port wired network to back up each other, enabling wireless and wired terminal equipment networking
- Support wireless modes such as AP, Client or AP+Client, and can be used as a Wi-Fi hotspot, wireless client or bridge to achieve wireless terminal device access
- Support serial port terminal device networking, can convert UDP, TCP, Modbus, HTTPD, WebSocket, MQTT and other protocols, and Support virtual serial ports
- Support industrial-grade DC power supply DC9~36V power input, anti-reverse connection
- High-strength metal casing, IP40 protection level, fanless casing for heat dissipation, work in -40°C~+75°C















## **Product Description**

MIR652-W is a wall-mount 4G industrial wireless router specially designed and developed for industrial communication network applications. It supports multi-network online such as LAN, WAN, WLAN, 4G LTE, etc., and can intelligently switch multi-network backup and realize serial port, wireless and wired terminal equipment networking. This product provides 1\*100M WAN port, 1\*100M LAN port, 1\*RS232/485 serial port, 1\*4G antenna interface, 2\*2.4GHz antenna interfaces and 1\*USB, supporting 1\*DC9 ~36V power input, wall-mount installation method, meeting the needs of various network sites.

The product supports WEB configuration of a variety of network management functions, such as PPPoE dial-up, DHCP server, 4G network, wireless settings, IP/MAC binding, static routing, firewall, VPN, serial port to network, network diagnosis, SNMP, LLDP, cloud services, etc.; The system provides user management with different permissions, supports local/remote log management, and supports scheduled restart, configuration backup and recovery, firmware upgrade, and factory settings restoration. 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°C~+75°C 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 4G cellular wireless network, Wi-Fi wireless network and WAN port wired network, and multi-network backup
- 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
- Support 4G cellular network, compatible with 2G/3G, support three networks, dual SIM single standby, APN
- Support link check, periodically check 4G network link status, and perform link recovery
- WLAN supports AP, Client or AP+Client modes, which can realize wireless terminal access, wireless network access or bridging
- 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
- 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., realize serial port to Ethernet or Modbus RTU/ASCII protocol
- Support Peanut Shell intranet penetration, and can use Peanut Shell dynamic domain name to remotely log in and manage devices
- 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





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, 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			
Firewall	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			
4G Cellular Netwo	ork			
Network Format	LTE-FDD, LTE-TDD, WCDMA, GSM/ EDGE			
Working Frequency	LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/B38/B39/B40/B41 WCDMA: B1/B5/B8 GSM/EDGE: B3/B8			
Theoretical Transfer Rate	LTE-FDD: DL 150Mbps/ UL 50Mbps LTE-TDD: DL 130Mbps/ UL 30Mbps HSPA+: DL 21Mbps/ UL 5.76Mbps WCDMA: DL 384kbps/ UL 384kbps EDGE: DL 236.8kbps/ UL 236.8kbps GRPS: DL 85.6kbps/ UL 85.6kbps			
TX Power	LTE-FDD: 23dBm±2dB LTE-TDD: 23dBm±2dB WCDMA: 24dBm+1/-3dB DCS1800(8-PSK): 26dBm±3dB EGSM900(8-PSK): 27dBm±3dB DCS1800: 30dBm±2dB EGSM900: 33dBm±2dB			



# ☑ = Specification

RX Sensitivity	LTE FDD (10M): -97dBm(B1)/ -97.5dBm(B3)/ -98dBm(B5)/ -98dBm(B8) LTE TDD (10M): -96.5dBm(B34)/ -97dBm(B38/B39/B40)/ -96dBm(B41) WCDMA: -108dBm(B1)/ -109dBm(B5)/ -110dBm(B8) DCS1800:-108dBm EGSM900: -108dBm			
Wi-Fi				
Working Frequency	2.4GHz (2.412GHz~2.484GHz)			
Theoretical Transfer Rate	300Mbps			
TX Power	802.11b: 17dBm~19dBm@11Mbps 802.11g: 15dBm~18dBm@54Mbps 802.11n: 15dBm~18dBm@MCS7 HT20/40			
RX Sensitivity	802.11b: -91.5dBm~-87.5dBm@11Mbps (PER<8%) 802.11g: -78dBm~-74dBm@54Mbps (PER<10%)			
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			
100M LAN	1*10/100Base-T(X) auto-sensing 100M RJ45 LAN port, supports full/half duplex, auto MDI/MDI-X			
Serial Port	Serial port type: 1*RS232/485 Connection method: 5-position 5.08mm pitch terminal block Baud rate: 300bps-230400bps Data bits: 5bit, 6bit, 7bit, 8bit Stop bit: 1bit, 2bit Check digit: None, Odd, Even			
Antenna Connector	3*SMA-K (external thread inner hole) antenna interfaces, of which 1 is used to connect the 4G cellular antenna and 2 is used for the 2.4G Wi-Fi antenna			
SIM Card Slot	2*standard SIM card slots (1.8V/3V), dual card single standby, supports China Mobile/China Unicom/Telecom 4G, China Unicom 3G, China Mobile/China Unicom 2G			
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, 4G indicator light, signal strength indicator light, electrical port speed and connection/activity indicator light			
Power Supply				
Input Voltage	DC 9~36V			
Full Load Power Consumption	<3.8W@DC12V			



# ☑ = Specification

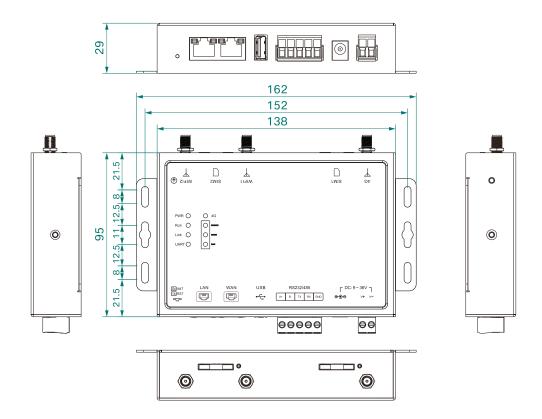
Connection	2-position 5.08mm pitch terminal block or Φ2.5mm DC round head				
Physical Characteristics					
Dimensions	162×95×29(mm)(mounting brackets included)				
Installations	Wall mount				
IP Code	IP40				
Working Environment					
Operating Temp	-40℃~+75℃				
Storage Temp	-40℃~+85℃				
Relative 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				





### **Dimensions**

Unit: mm

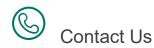






# Ordering Information

Standard Model	100M WAN	100M LAN	RS232/485	4G Antenna	2.4GHz Antenna	Input Voltage
MIR652-W	1	1	1	1	2	DC9~36V



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