

MIR652R-W

1 WAN Port + 1 LAN Port + 1 RS232/485 Port to 4G+Wi-Fi Wireless DIN RAIL Industrial Router



- Support 1 100M WAN port, 1 100M LAN port, 1 RS232/485 serial port, 1 4G antenna interface, 2 2.4G antenna interface, 1 dual Nano SIM card slot
- Support 4G cellular wireless network and WAN port wired network as mutual backup, which can realize wireless and wired terminal equipment networking
- Support wireless modes such as AP, Client or AP+Client, can be used as a Wi-Fi hotspot, wireless client or network bridge, and can realize wireless terminal device access
- Support serial terminal equipment networking, convert UDP, TCP, Modbus, HTTPD, WebSocket, MQTT and other protocols, support virtual serial port
- Support DC 9~36V power input, anti-reverse connection
- High-strength aluminum alloy shell, IP40 protection level, no fan shell heat dissipation, the equipment can work reliably in the harsh industrial environment of -40°C~+75°C





Product Description

MIR652R-W is a 2-port 100 megabit card rail 4G wireless industrial router designed and developed for industrial communication network applications. It supports LAN, WAN, WLAN, 4G LTE and other multi-network online, intelligent switching multi-network backup, and can realize the networking of serial, wireless and wired terminal devices. The product provides 1 WAN port, 1 LAN port, 1 RS232/485 serial port, 1 4G antenna interface and 2 2.4G antenna interface and other types of interfaces, support 1 DC 9~36V power input, using standard DIN card rail installation mode, to meet the needs of a variety of 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 supports user management with different permissions, local and remote log management, periodic restart, configuration backup and restoration, firmware upgrade, and factory Settings restoration. Support one-click restart or restore factory Settings. The hardware adopts high standard industrial protection design, selected industrial components, and adopts high-strength aluminum alloy shell, which is durable; Low power consumption, wide temperature design, no fan shell heat dissipation, support -40°C~+75°C operating temperature, through strict safety regulations and EMC testing, to meet the harsh industrial environment application needs.



Product Features

- Support 4G cellular wireless network, Wi-Fi wireless network and WAN port wired network, support multi-network backup
- The WAN port supports DHCP protocol, static address, PPPoE dial-up, etc. to connect to the external network, or as a LAN port to connect to the internal network
- The LAN port supports a DHCP server, which centrally manages and configures user IP addresses dynamically
- Support 4G cellular network, compatible with 2G/3G, support triple play, dual card single standby, APN
- Support link check, periodically check the 4G network link status, and perform link recovery
- WLAN supports AP, Client or AP+Client and other modes, which can realize wireless terminal access, wireless network access or bridging
- Support IPv4/IPv6 Ping, IPv4/IPv6 Traceroute, Nslookup, and packet capture, which can be used for network diagnosis or fault analysis
- The firewall supports SYN-flood defense, port mapping, IP/MAC/DNS address filtering, iptables command custom rules, DMZ isolation zone, UPnP, IP/MAC speed limit, QoS limit upload/download rate, etc.
- The log information records various levels of kernel, application and network information, and supports local downloading, regular 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 conversions mode, realize serial port to Ethernet or Modbus RTU/ASCII protocol
- Support peanut shell intranet penetration, you can use the peanut shell dynamic domain name to remotely log in and manage devices
- Support dynamic DNS function, and can remotely log in and manage the device through a specified domain name
- Support VPN client and server to build a private network, the client supports PPTP, L2TP, IPSec, OpenVPN, GRE and other tunneling protocols, and the server supports PPTP, L2TP and IPSec and other protocols
- Support SNMPv1/v2c, and can perform information query, information modification and troubleshooting through MIB, and realize centralized management
- Support LLDP, obtain LLDP neighbor device information, monitor link status, facilitate topology management and fault location
- Support Maiwe cloud platform management to realize remote management of equipment and monitoring of on-site network status

Technical Specifications

Software	
Management	Support traffic statistics, running status, network status, local machine 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 card 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 service Support PPTP/L2TP/GRE/TUN/TAP protocol VPN client Support PPTP/L2TP/IPSec protocol VPN server
Firewall	Support SYN-flood defense, IP dynamic masquerading, MSS clamping, inbound/outbound data control Support WAN/LAN port TCP/UDP port mapping Support IP/MAC/domain name filtering, iptables, DMZ, UPnP, IP/MAC/QoS speed limit
System management	Support IPv4/IPv6 Ping, IPv4/IPv6 Traceroute, Nslookup, capture network packets Support time zone, NTP client/server, management port, Crontab, remote/local log Support user rights management, SSH access Support online restart, scheduled restart, configuration backup/restore, flash firmware, restore factory settings
4G cellular network	
Network	LTE-FDD、LTE-TDD、WCDMA、GSM/ EDGE
Frequency bands	LTE-FDD : B1/B3/B5/B8 LTE-TDD : B34/B38/B39/B40/B41 WCDMA : B1/B5/B8 GSM/EDGE : B3/B8
Maximum transfer rate (theoretical value)	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

Technical Specifications

Maximum transmit power	EGSM900 : 33dBm±2dB DCS1800 : 30dBm±2dB WCDMA : 24dBm+1/-3dB LTE FDD/TDD : 23dBm±2dB
Receiver sensitivity	EGSM900 : -109dBm DCS1800 : -107dBm WCDMA : -109.4dBm(B1) / -109.7dBm(B5) / -110.2dBm(B8) LTE FDD : -98.1dBm(B1)/ -97.1dBm(B3)/ -98.9dBm(B5)/ -97.4dBm(B8) LTE TDD : -96.6dBm(B34)/ -96.7dBm(B38)/ -97.6dBm(B39)/ -97.4dBm(B40) / -95dBm(B41)
Wi-Fi	
Working frequency	2.4GHz (2.412GHz~2.484GHz)
Maximum transfer rate (theoretical value)	300Mbps
Maximum transmit power	802.11b : 17dBm~19dBm@11Mbps 802.11g : 15dBm~18dBm@54Mbps 802.11n : 15dBm~18dBm@MCS7 HT20/ 40
Receiver sensitivity	802.11b : -91.5dBm~-87.5dBm@11Mbps (PER < 8%) 802.11g : -78dBm~-74dBm@54Mbps (PER < 10%)
Interface	
100M WAN	1-way 10/100Base-T(X) adaptive 100M RJ45 WAN port (supports LAN mode), supports full/half duplex, MDI/MDI-X adaptive
100M LAN	1-way 10/100Base-T(X) adaptive 100M RJ45 LAN port, supporting full/half duplex, MDI/MDI-X adaptive
Serial port	Serial port type: 1 way RS232/485 Connection method: 3.81mm pitch 7PIN terminal block, the serial port occupies 5 positions Baud rate: 300bps-230400bps Data bits: 5bit, 6bit, 7bit, 8bit Stop bit: 1bit, 2bit Check digit: None, Odd, Even
Antenna interface	3-way SMA-K (external thread and inner hole) antenna interface, one of which is used to connect to 4G cellular antenna, and the other two are used for 2.4G Wi-Fi antenna

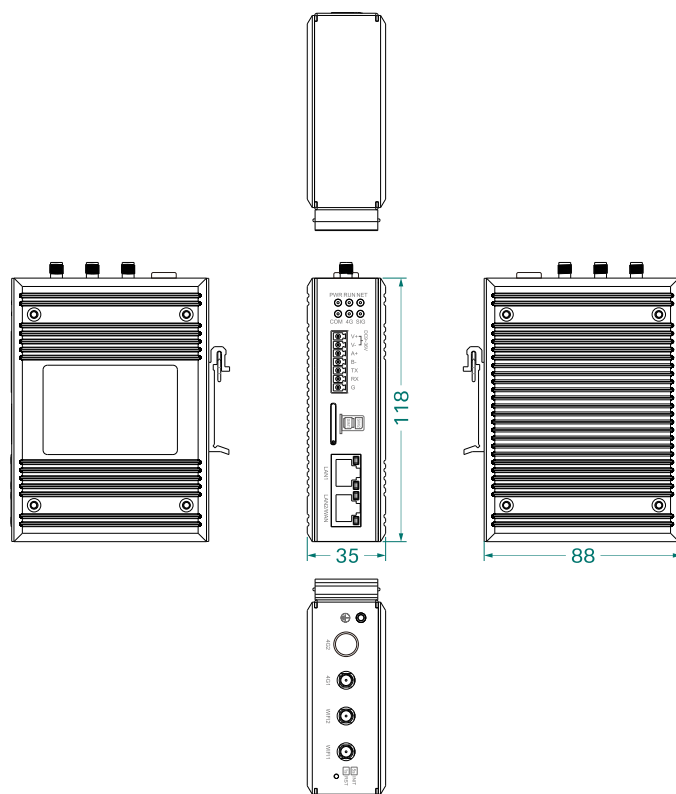
Technical Specifications

SIM card interface	1-way dual Nano SIM card slot, dual card single standby
Indicator light	Power indicator, running indicator, network indicator, serial port indicator, 4G indicator, signal strength indicator, electrical port speed and connection/activity indicator
Power	
Power input	DC 9~36V
Full load power consumption	< 3.5W@DC24V
Connection method	3.81mm pitch 7PIN terminals, power supply occupies 2 positions
Power protection	Anti-reverse connection
Mechanical	
Size	118×35×88(mm)
Installation method	35mm 标准 DIN 卡轨式安装
IP protection	IP40
Weight	About 0.37kg
Working environment	
Operating temperature	-40°C~+75°C
Storage temperature	-40°C~+85°C
Relative humidity	5%~95%
Industry standard	
EMC	IEC 61000-4-2 (ESD): Level 4 (contact discharge ±8kV, air discharge ±15kV) IEC 61000-4-5 (Surge): Level 4 (power supply: common mode ±4kV, differential mode ±2kV; Network port: common mode ±6kV, differential mode ±2kV; Serial port: common mode ±4kV) IEC 61000-4-4 (EFT): Level 4 (power supply: ±4kV; network port, serial port: ±2kV)



Installation size

Unit:mm



 Ordering information

Model	100M WAN	100M LAN	RS232/485	4G antenna interface	2.4G antenna interface	Power
MIR652R-W	1	1	1	1	2	DC 9~36V