

MRouter 302 Industrial LTE router



- High Performance 32bit Industrial Grade Processor
- Industrial Grade 4G LTE Modem Performance
- 12VDC Power Input and Wide Power Input Range 5V~24V
- Automatic System Recovery From System Failures
- Industrial Grade Interfaces with full ESD protection
- Support VPN Client Functions
- Rugged Metal Casing
- Support 4G LTE FDD , CAT NB Bands



■ Product Description

In a networked world where everything is connected, the demand for communication will become much and much stronger, especially in the field of smart industrial application and control. The MR302 LTE router is also a new generation 4G wireless VPN router launched by ChengDu Mobitel Technology Co., Ltd. for industrial level application. The device provides fast Internet access by virtue of the explosive growth of 4G cellular data network and a variety of high-speed networked broadband access services. With its security, stability and intelligence performance, thousands of devices can be easily networked, providing high-speed data transmission and communication for the true meaning of Internet of Things.

The ME302 also provides an Ethernet WAN/LAN multiplexing RJ45 network port, an Ethernet LAN RJ45 network port, a set of industrial Phoenix terminal blocks (serial function and power supply

function), a drawer type SIM/UIM card slot, which can have the serial port, Ethernet port, and Wi-Fi connected at the same time for enabling pass-through transmission.

The MR302 supports remote management via a cloud platform. The cloud platform has a simple graphical interface that can be quick to use. It can let you know the current status of the device anytime and anywhere. Such application is widely used in the M2M industry and the Internet of Things industry chain, such as smart grid, smart transportation, smart home, finance, Mobile POS terminals, supply chain automation, industrial automation, smart buildings, fire protection, public safety, environmental protection, meteorology, digital medical care, remote sensing surveys, military, exploration, agriculture, forestry, water affairs, coal mines, petrochemicals and other industrial fields.

Features

- ◆ Stable and reliable; 7*24 hours of continuous work, flexible networking;
- ◆Full package of industrial design, metal shell, protection class of IP30;
- ◆Horizontal desktop placement, wall-mounted lug mounting installation;
- ◆Wide voltage DC 5-24V input, power reverse protection;
- ◆Multiple protection from static electricity, surge and electric rapid pulse group etc.;
- ◆Built-in hardware watchdog, fault self-detection, self-repair, system stability.
- ◆4G network, compatible with 3G/2G network system;
- ◆Support automatic network check, 4G/3G/2G system switch, support APN/VPDN network adapter;
- ◆Support cable /4G multi-network online at the same time, multi-network intelligent switching backup function;
- ◆ Cloud service is supported to facilitate centralized management of equipment systems and improve operation and maintenance efficiency;
- ◆The router's built-in web page can be opened through the cloud, without private network or public IP address;



- ◆ Support 1 wired LAN interface, 1 wired WAN interface (can be switched to a LAN interface), 10/100Mbps rate;
- ◆Support one RS232/RS485 serial interface;
- ◆Support one WLAN and multiple LED communication indicators;
- ◆Support VPN (PPTP, L2TP, IPSec, OpenVPN, and GRE) and VPN encryption;
- ◆ Support wired and wireless multi-network online at the same time, multi-network intelligent switching backup function;
- ◆ Support APN automatic network check, system switching, SIM information display, support APN/VPDN network adapter;
 - ◆Support PPPoE, DHCP, and static IP.
 - ◆Support firewall, NAT, blacklist and whitelist access restriction, SNAT and DNAT function;
- ◆Support traffic services. Interface rate limiting, IP rate limiting, and MAC rate limiting can be set as required;
 - ◆Support SSH, TELNET, and Web multi-platform management configuration;
- ◆ Support M2M remote management platform with functions of remote monitoring, upgrade, and parameter configuration.
 - ◆Support one-click restoration of factory settings and hardware watchdog to ensure system stability.

Hardware Specifications

System Memory	64MB / Optional 128MB DDR2 RAM	
Flash	8MB / Optional 16MB SPI Flash	
Wi-Fi	Wi-Fi 4 (802.11n)	
Interfaces	2.4GHz IEEE 802.11n MIMO up to 300Mbps	
	Detachable High Gain WIFI Antennas	
	WAN	
	LAN	1 x 10/100Mbps FE RJ45 Port, auto MDI/X, with 1.5KV magnetic
		isolation protection
	SERIAL	1 x 10/100Mbps FE RJ45 Port, auto MDI/X, with 1.5KV magnetic
		isolation protection
Indicators	SIM	3.81 spacing wiring terminal, 232/485 support, transparent transmission from the serial port to the network by default
	ESIM	1 x Drawer-Type SIM Card Holder, Support Standard 1.8V/3V
		USIM/SIM Card, 15KV ESD Protection
	Power	Support 5*6 SO8 ESIM card
	Reset	Standard DC Power Input Jack, reverse-voltage protection and
		surge protection
	WPS	1 x Reset Button
	Antenna	1 x WPS Button



	PWR LED Indicator x 1	1 x Standard SMA Antenna Connector, 50 ohm (Cellular)	
		1 x Standard RP-SMA Antenna Connector, 50 ohm (WiFi)	
EMC	level3		
Power Input	Power Type		
Watchdog	Power Range	12VDC/1A	
	Power Consumption	5~24VDC Wide Power Input	
	Built-in Hardware Watchdog, Support Device Operation Self-Check Technology, Auto Recovery From Device Failure	<450mA (12V), Average 175mA@12V	
Enclosure	Ruggedized Metal Casing. The Casing and The System Are Safely Isolated, Especially Suitable for Industrial Control Field Applications.		
Dimensions	Overall size: 105*82*23mm		
Weight	Approx. 280g (Excluding Antenna and Mounting Sets)		
Environment	Operating Temperature: -20°C to 75°C		
Firmware	Storage Temperature: -40°C to 125°C		
	Operating Humidity: 10% to 95% RH Non-condensing		
	Storage Humidity: 5% to 95% RH Non-condensing		
	Linux SDK		

Cellular Specifications

LTE Category	LTE Cat4	
Frequency*	UE Version	LTE-FDD: B1, B3, B7, B8, B20, B28 LTE-TDD: B38, B40, B41 WCDMA: B1, B8 GSM: B3, B8

Software Specifications

	Support VPN (PPTP, L2TP, IPSec, OpenVPN, and GRE) and VPN encryption.
Network	Support wired and wireless multi-network online at the same time, multi-network intelligent switching backup function.



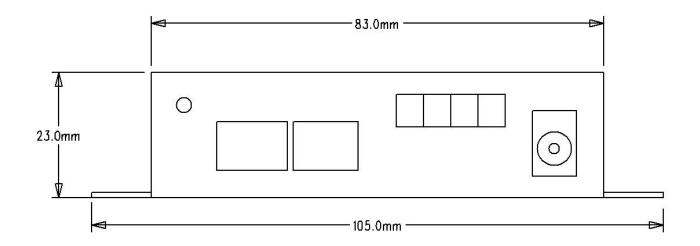
	Support automatic network check, 4G/3G/2G system switch.
	Support APN automatic network check, system switching, SIM information display, support APN/VPDN network adapter.
	Support PPPoE, DHCP, and static IP.
Firewall	Support firewall, NAT, blacklist and whitelist access restriction, SNAT and DNAT function
riiewaii	Support traffic services. Interface rate limiting, IP rate limiting, and MAC rate limiting can be set as required
	The router's built-in web page can be opened through the cloud, without private network or public IP address.
	Support SSH, TELNET, and Web multi-platform management configuration.
Management	Support M2M remote management platform with functions of remote
	monitoring, upgrade, and parameter configuration
	Support one-click restoration of factory settings and hardware watchdog to ensure system stability.

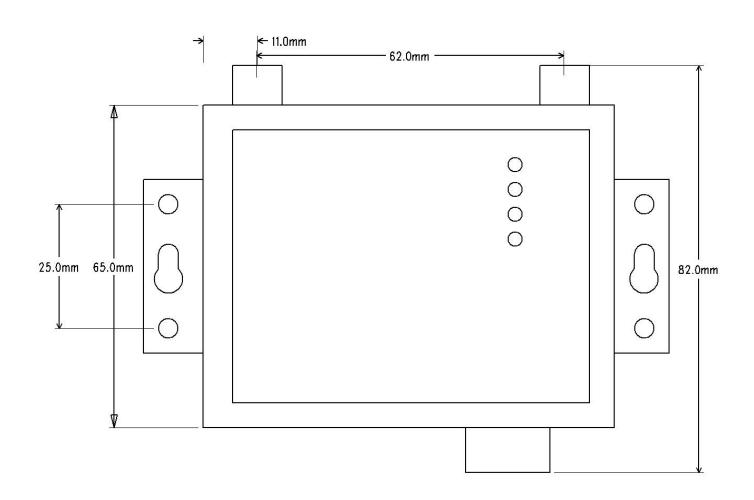
■ Product Views



■ Product Dimensions







^{*} Different models and specifications correspond to different prices



INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH MOBITEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN MOBITEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, MOBITEL ASSUMES NO LIABILITY WHATSOEVER, AND MOBITELDISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF MOBITELPRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. UNLESS OTHERWISE AGREED IN WRITING BY MOVINGCOMM, THE MOBITELPRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE MOBITELPRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Mobitel may make changes to specifications and product descriptions at any time, without notice. Buyers must receive a confirmation from Mobitel prior using the product. Mobitel shall have no responsibility whatever for conflicts or incompatibilities arising from future changes to them.

Copyright © 2013-2021 ChengDu Mobitel Technology Co., Ltd. All rights reserved.

