

5G Industrial Router

MR100 V2



Introduction

MR100 V2 is a wireless communication router for the Internet of Things (IoT), it uses a high-performance industrial level 32-bit communication processor and wireless module, embedded with the real-time operating system as the software platform, and using 3G/4G/5G cellular network to provide users with wireless long-distance large data transmission function.



Industrial-grade Design

- ▶ High-performance industrial-grade wireless module
- ▶ High-performance industrial-grade 32-bit communication processor
- ▶ Metal shell, protection grade IP30. Metal housing and system safety isolation
- ▶ Wide power input DC 9~36V



Stability & Reliability

- ▶ WDT Watchdog design to ensure system stability.
- ▶ Adopt a complete anti-drop mechanism to ensure that the data terminal is always online.
- ▶ Built-in 1.5KV electromagnetic isolation protection for Ethernet interface
- ▶ RS232/RS485 interface power and data isolation, in line with CSA, UL and IEC standards
- ▶ SIM/UIM card interface built-in 15KV ESD protection
- ▶ Built-in reverse phase protection and over voltage protection for power interface



Standard & Convenience

- ▶ Standard RS232, RS485, Ethernet and WIFI Interface
- ▶ Standard WAN port (support standard PPPOE protocol), which can be directly connected to ADSL equipment.
- ▶ Intelligent data terminal can enter data transmission state after power on
- ▶ Easy to use, flexible, multiple working mode options.
- ▶ Convenient system configuration and maintenance interface (WEB/CLI)
- ▶ Support wall-mounted installation

5G Industrial Router MR100



High Performance

- ▶ Support 3G/4G/5G and wired WAN dual link backup (Optional)
- ▶ VPN client/server PPTP/L2TP/IPSEC (Only available in VPN version)
- ▶ Remote management SYSLOG/SNMP/TELNET/SSH/HTTPS
- ▶ WIFI support WEP/WPA/WPA2 encryption
- ▶ Support multiple online and offline trigger modes
- ▶ Support APN/VPDN
- ▶ Support DHCP server / DHCP client/ DHCP binding MAC/DDNS/NAT/DMZ/QOS
- ▶ Support SPI firewall.
- ▶ Support URL filter.
- ▶ Support IPV6/IPV4, 5G LAN
- ▶ Support lock frequency, lock resident.
- ▶ Support EOIP, bridge mode, VxLAN, virtual IP, GRETAP, etc.
- ▶ Support traffic statistics, VLAN management, and VLAN division

Product Specification

Cellular Specification	
Series	MR100 V2
Items	Contents
Module	Industrial grade wireless module
Frequency	5G NR NSA : n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/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/B9/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71 LTE-TDD : B34/B38/39/B40/B41/B42/B43/B48 WCDMA : B1/B2/B3/B4/B5/B6/B8/B19 5G NR: DL 4 × 4 MIMO: n1/n2/n3/n7/n25/n38/n40/n41/n48/n66/n77/n78/n79 UL 2 × 2 MIMO: n41 LTE: DL 4 × 4 MIMO: B1/B2/B3/B4/B7/B25/B30/B32/B34/B38/39/B40/B41/B42/B43/B48/B66 Note: B32/B46 supports receiving only. The supported frequency band varies according to the version of the selected region
Theoretical Bandwidth	NR SA: DL: 1.92Gbps , UL: 630Mbps NR ENDC: DL: 1.92Gbps (B39+N41 1.7Gbps) , UL: 380Mbps LTE: DL: 487Mbps , UL: 150Mbps WCDMA: DL: 42Mbps , UL: 11Mbps

5G Industrial Router MR100

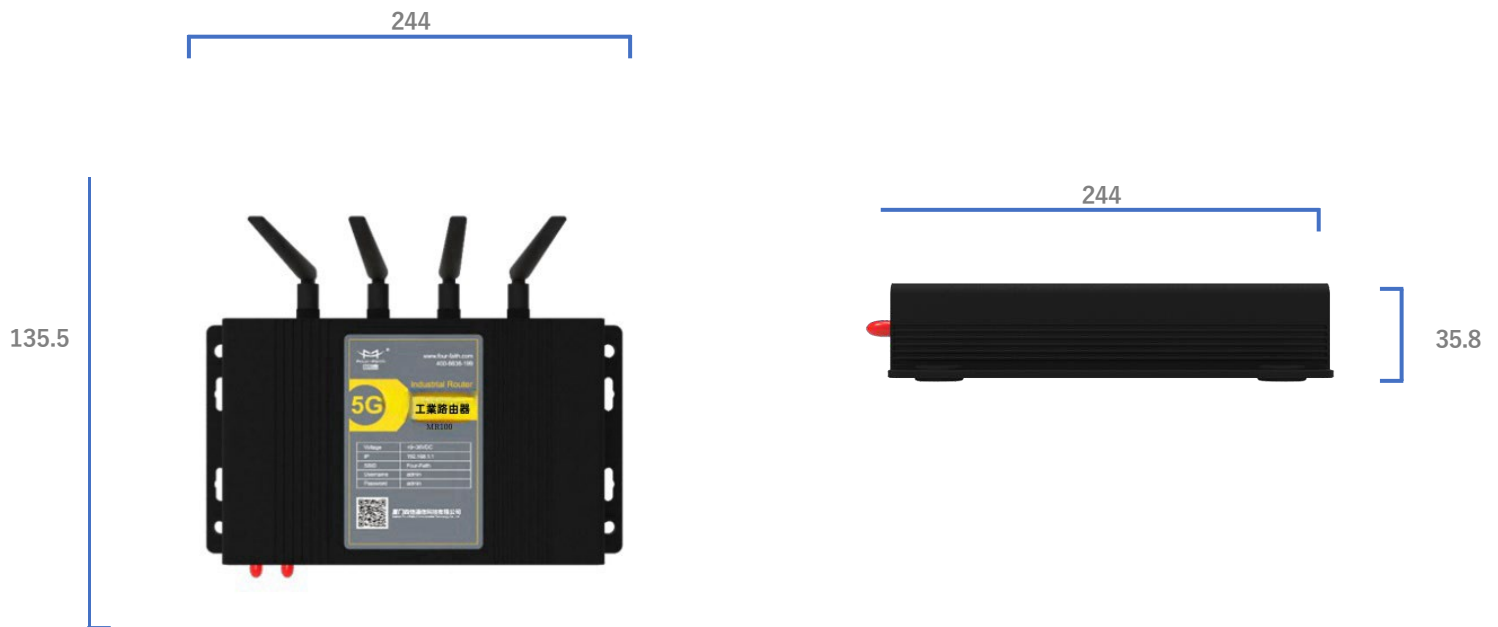


WIFI Specification	
Series	MR100 V2
Items	Contents
WIFI Protocol	IEEE802.11 a/b/g/n/ac/ax
Frequency	2.4GHz + 5GHz
Theoretical Bandwidth	2.4GHz 2x2MIMO 11ax, 0.573 Gbps 5GHz 2x2MIMO 11ax, 1.2 Gbps
WIFI Bandwidth	20MHz, 40MHz, 80MHz
MESH Network	Support Four-Faith router and CPE to build the MESH network
Hardware System	
Items	Contents
CPU	880MHz dual core CPU
FLASH	128MB
DDR3	512MB
Interfaces	
Items	Contents
WAN	1 x 1G ETH port (RJ45), auto adapt MDI/MDIX
LAN	4 x 1G ETH port (RJ45), auto adapt MDI/MDIX
Indicators	Signal, 5G, 4G, WIFI, Power
SIM Card	Standard drawer SIM card interface compatible with patch eSIM
Antenna	Cellular : 4 x SMA female, characteristic impedance 50 ohms WIFI : 2 x SMA male, characteristic impedance 50 ohms
Power	2.5mm DC interface built-in power reverse protection
Reset Button	Through this button, the parameter configuration can be restored to the factory
Physical Characteristics	
Items	Contents
Shell	Metal shell, IP30
Size	244x135.5x35.8 mm (Does not include antenna and mounting parts)
Weight	980g
Operating Temperature	-35~+75°C (-31~+167°F)
Storage Temperature	-40~+85°C (-40~+185°F)
Relative Humidity	95% (No condensation)
Power Supply	
Items	Contents
Standard	DC 12V/1.5A
Range	DC 9~36V
Consumption	<1.2A (12V)

5G Industrial Router MR100



Dimension (mm)



Order Information

Models	Description
MR100 V2	Cellular (5G NR), 2.4G/5G WIFI, SIM*1 (Or eSIM)