

4G

Industrial Router IWR202



Introduction

IWR202 is an industrial-grade router featuring a high-performance processor and wireless module, running on an embedded real-time operating system. It offers versatile connectivity with 1 x RS232, 1 x RS485, 1 x Ethernet LAN, 1 x Ethernet WAN, DI/DO, and Wi-Fi. This router enables seamless data transmission between serial, Ethernet, and Wi-Fi devices. It supports dual SIM cards with intelligent switching for backup, making it perfect for industrial IoT and M2M applications, ensuring reliable and continuous connectivity.



Industrial-grade Design

- ▶ High-performance industrial-grade CPU
- ▶ High-performance industrial-grade wireless communication module
- ▶ Metal casing, IP30 protection level
- ▶ Wide range power input (DC 5~36V)



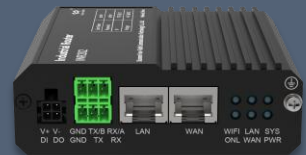
Stability & Reliability

- ▶ EMC Level 3 and above, with strong anti-interference capability
- ▶ Dual SIM card design with complete dropout prevention mechanisms, ensuring the data terminal is always online
- ▶ Ethernet interface with 1.5KV electromagnetic isolation protection
- ▶ RS232/RS485 interfaces with 1.5KV ESD protection
- ▶ SIM card interface with 15KV ESD protection



Standard & Convenience

- ▶ Provides standard RS232 and RS485 ports for direct connection to serial devices
- ▶ 2 x 100M Ethernet ports for direct connection to Ethernet devices
- ▶ Supports standard network protocols, ensuring strong compatibility
- ▶ Supports remote management, simplifying operations
- ▶ Supports rail and wall-mounted installation for flexible deployment



High Performance

- ▶ Supports multiple VPN protocols including IPsec, OpenVPN, and WireGuard
- ▶ Built-in MQTT gateway, supporting data transparent transmission to HTTP/MQTT/Azure cloud
- ▶ Supports remote management platform and PC client applications
- ▶ Supports SPI firewall
- ▶ Wi-Fi supports multiple encryption methods including WEP, WPA, WPA2 and,etc.
- ▶ Supports multiple network protocols including TCP, UDP, IPv4, DNSS, Telnet
- ▶ Supports mounting remote file systems via SSH protocol
- ▶ Equipped with DDoS protection (SYN flood protection, SSH attack protection, Telnet attack protection)
- ▶ Flexible access control for SSH, Web interface, CLI, and Telnet
- ▶ Supports MODBUS TCP and Modbus RTU status/control
- ▶ Supports MQTT subscription and MQTT publishing
- ▶ Supports bridging and transparent transmission functions

Product Specification

Cellular Specification

| Model | CAT4 | CAT6 | 5G Redcap |
|-------------------|---|---|--|
| Items | Contents | | |
| Standard and Band | LTE FDD: B1/3/5/7/8/20/28 | LTE FDD: B1/3/5/7/8/20/28/32 | 5G NR SA: n1/2/3/5/7/8/12/13/14/18/20/25/26/28/30/38/40/41/48/66/70/71/ 77/78/79 |
| | LTE TDD: B38/40/41 | LTE TDD: B38/40/41(120M) | LTE FDD: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/30/66/70/71 |
| | WCDMA: B1/5/8 | WCDMA: B1/3/5/8 | LTE TDD: B34/38/39/40/41/42/43/48 |
| | GSM/GPRS/EDGE: 850/900/1800MHz | | |
| | | | |
| Bandwidth | LTE FDD 150Mbps DL, 50Mbps UL | LTE : 300Mbps DL, 50Mbps UL | 5G SASub-6: 223Mbps DL, 123Mbps UL |
| | LTE TDD 130Mbps DL, 30.5Mbps UL | WCDMA: 42 Mbps DL, 5.7Mbps UL | LTE: 195Mbps DL, 105Mbps UL |
| | WCDMA: 384Kbps DL, 384Kbps UL | | |
| | | | |
| Hardware System | | | |
| Items | Contents | | |
| CPU | Industrial-grade CPU | | |
| Flash | 32MB | | |
| DDR3 | 128MB | | |

Industrial Router

IWR202



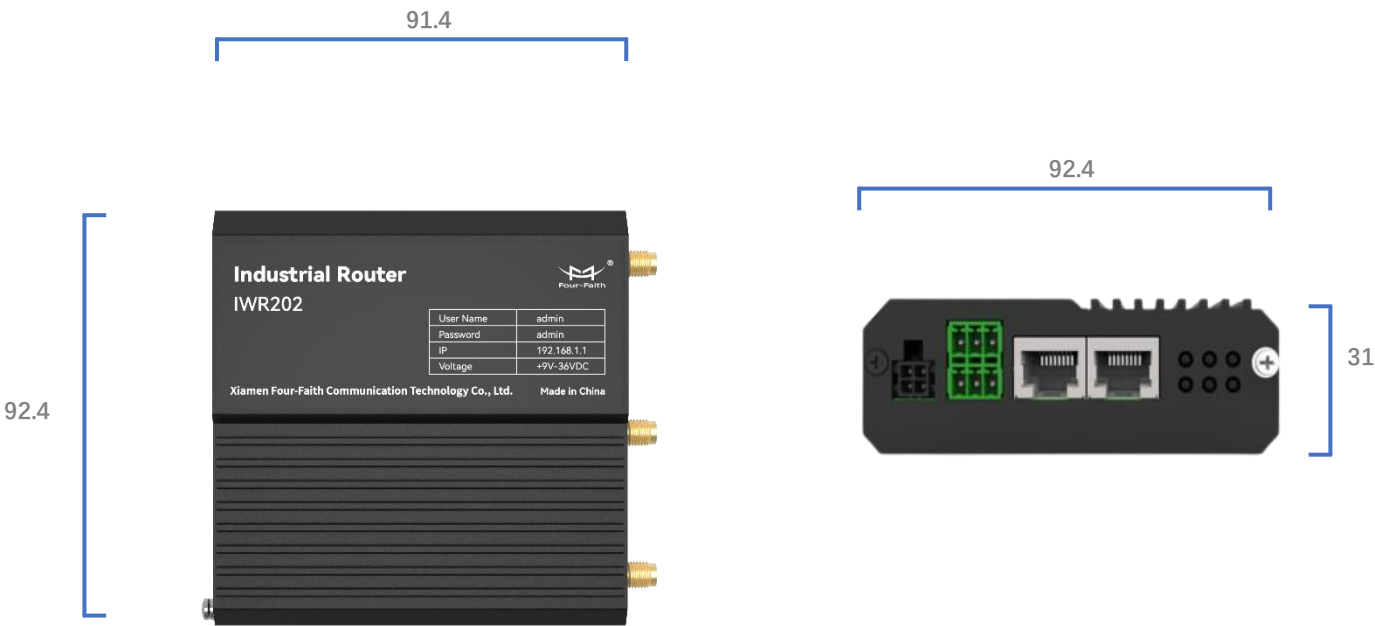
| WIFI Specification | | | | |
|-----------------------|--|--|------|-----------|
| Product | | CAT4 | CAT6 | 5G Redcap |
| Items | | Contents | | |
| Standard and Band | | IEEE802.11b/g/n, 2.4G | | |
| Bandwidth | | IEEE802.11b/g: 54Mbps (Maximum) IEEE802.11n: 144Mbps (Maximum) | | |
| Security | | Support WEP, WPA, WPA2 and other encrypt methods | | |
| Transmit Power | | 15 ± 2dBm | | |
| Sensitivity | | < -72dBm @ 54Mbps | | |
| Interfaces | | | | |
| Items | | Contents | | |
| WAN Interface | | 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD | | |
| LAN Interface | | 1 x 10/100M RJ45 ethernet port, adaptive MDI/MDIX, built-in 15KV ESD (Support Passive POE) | | |
| Serial | | 1 x RS232, 1 x RS485 serial interface with built-in 15KV ESD | | |
| I/O | | 1xDI, 1xDO | | |
| LED Indicators | | “PWR”, “Online”, “LAN”, “WAN”, “WIFI”, “SYS” | | |
| Antenna Interface | | Cellular: 2 x Standard SMA female antenna interface, characteristic impedance: 50 Ω WIFI: 1 x Standard SMA male antenna interface, characteristic impedance: 50 Ω | | |
| SIM/UIIM Slot | | 2 x Standard 2FF SIM card slot | | |
| Power Interface | | Standard 4 pin terminal block interface, with built-in phase-reversal and over-voltage protection | | |
| Reset Button | | Can reset router’s configuration to default factory setting by this button | | |
| Power Consumption | | | | |
| Items | | Contents | | |
| Standard | | DC 12V/1.5A | | |
| Voltage Range | | DC 9~36V | | |
| Operating Current | | <1.2A (12V) | | |
| Physical Properties | | | | |
| Items | | Contents | | |
| Casing | | Aluminum metal casing, IP30 protection level | | |
| Dimensions | | 91.4x92.4x31mm (excluding antennas and mountings) | | |
| Weight | | 200g | | |
| Operating Temperature | | -40~+75℃ | | |
| Storage Temperature | | -40~+85℃ | | |
| Relative Humidity | | 95% (non-condensing) | | |

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IWR202



Dimension (mm)



Order Information

| Model | Description |
|-----------|--|
| IWR202 | 4G(CAT-4), 2 x SIM, 1 x RS232, 1 x RS485, 1 x DI, 1 x DO, 2.4G WIFI |
| IWR202-C6 | 4G(CAT-6), 2 x SIM, 1 x RS232, 1 x RS485, 1 x DI, 1 x DO, 2.4G WIFI |
| IWR202-5R | 5G Redcap, 2 x SIM , 1 x RS232, 1 x RS485, 1 x DI, 1 x DO, 2.4G WIFI |