

Compact Industrial 4G/ Wi-Fi Router

InRouter202

Industrial LTE Router



InRouter202 (IR202) is a series of IoT wireless router that integrates 4G network, virtual private network and other technologies. It relies on 4G wireless wide area network and Wi-Fi wireless local area network technology to provide uninterrupted multiple network access capabilities. With its comprehensive security and wireless services and other features, IR202 support up to 10,000-level equipment networking, providing high-speed data access for equipment informalization.

The design of IR202 fully meets the needs of unattended on-site communication, and adopts software and hardware watchdogs and multi-level link detection mechanisms to ensure the stability and reliability of communication. Moreover, it supports InHand DeviceManager cloud management platform, which provides convenience for users to manage remotely and fully guarantees the intelligence of device management. IR202's humanized WEB configuration interface design facilitates user configuration and greatly reduces the difficulty of use.

Multiple network access, easy deployment and complete remote management functions shine in the wave of IoT construction.

IR202 router is mainly suitable for large-scale equipment networking, and it is applied in many fields, such as

- Express cabinet terminal
- Branch network
- Business networking
- Municipal heating, gas valve rooms
- Water treatment
- Security or criminal investigation
- Smart grid
- Intelligent manufacturing
- Photovoltaic
- Automated industry

Application Case



Features and Advantages

- + Supports 4G/LTE/CAT4 high speed network
- + 5 Ethernet ports, WAN/LAN
- + Support IPSEC VPN functions
- + Multiple link redundancy design ensures uninterrupted communication
- + Supports InHand Device Manager cloud platform, realizes remote centralized network management
- + Support large-scale equipment network deployment
- + Compact sized, easy to fit

● Provide uninterrupted multiple network access capabilities

Provides fast LTE wide area network link to achieve business continuity and wide area network diversity. Regardless of where the device is located, users can choose a 4G network with extensive global coverage to ensure device interconnection. Users can choose LTE CAT4 (downlink 150Mbps, uplink 50Mbps) network service.

IR202 supports Wi-Fi, integrates AP/client, and easily builds a secure wireless network. It supports 802.11b/g/n standard communication to meet the needs of users for WLAN wireless access. The rate can reach up to 150Mbps, easy to build a wireless local area network. IR202 also support WEP/WPA/WPA2 encryption to ensure the security of wireless LAN.

● Strong security protection

Transmission security: supports IPsec VPN to ensure data transmission security.

Network protection: supports SPI stateful detection, Secure Shell (SSH), intrusion protection (forbidden ping), DDoS defense, attack defense, IP-MAC binding, etc. to protect against external attacks.

Access security: supports user hierarchical authorization, implements secure access management by giving different roles different permissions.

● High reliability and stability

Link layer detection: detects link conditions, auto redial when dropped off to maintain link connection.

PPP layer detection: maintains connection to carrier network side, prevents forced hibernation, and keep network link smooth.

VPN tunnel detection: maintains stable connection of VPN tunnels and continuous data transmission.

Device fault self-recovery: embedded hardware watchdog, self-recovers from malfunctions, maintaining high device availability.

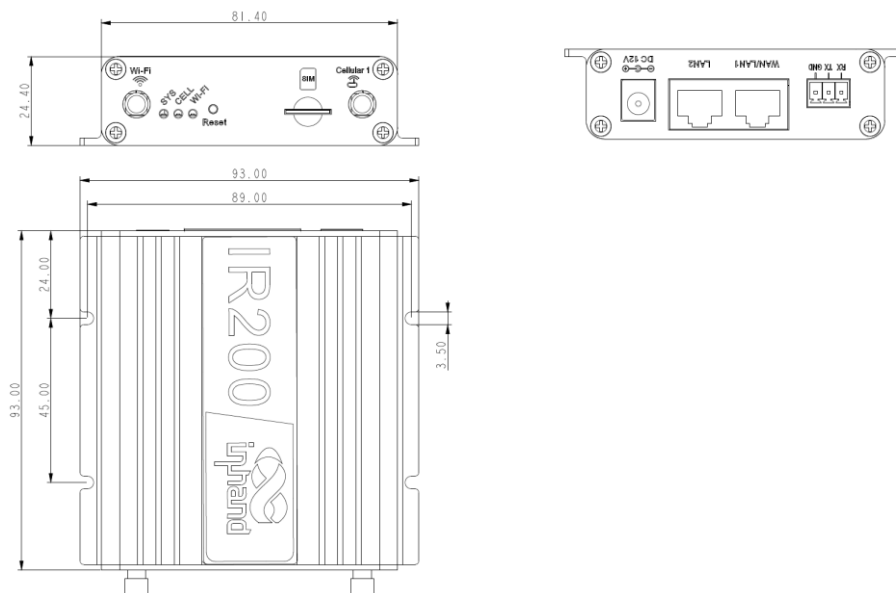
● Network management cloud platform for centralized management and deployment

Supports InHand Device Manager (DM) cloud platform to facilitate remote monitoring and central management of large-scale device networks. Batch configures large numbers of devices, improve network deployment and maintenance efficiency

● Industrial-grade design

Metal housing, IP30 protection rating. Reach level 2 on EMC indexes. Ethernet port supports 1.5KV isolation protection. Wide operating temperature: -20°C~70°C.

Dimensions (mm)



Product Specifications

IR202 Hardware Specifications			
Product	IR202		
CPU	MT7628DAN , 580MHz		
RAM	64MB DDR2		
Flash	16MB SPI Flash		
Interface			
Ethernet Port	2*10/100Mbps fast Ethernet ports, WAN/LAN port 1.5KV network isolation protection		
Power Supply	DC12V, ±20% deviation		
Industrial Serial Port	RS-232 x 1; ESD protection: 15KV		
Reset	Pinhole reset button		
SIM Card	Drawer-type Micro SIM card slot x 1		
Antenna Connector	3G/4G: SMA WLAN: RP-SMA		
Ground Terminal	Has no ground terminal		
Mechanical Specs			
Dimensions (mm)	103x81.4x26.5mm	Weight (g)	168g
Installation Method	Integrated lugs mounting	Protection Rating	IP30
Housing	Metal housing	Cooling	Fanless
Power Rate			
Standby Power	0.98-1.46W		
Working Power	1.37-1.58W		
Peak Power	1.62W		
Wi-Fi Transmit Power			
Transmit Power	802.11b:16dBm +/-2dBm(11Mbps) 802.11g:16dBm +/-2dBm(54Mbps) 802.11n@2.4GHz:16dBm +/-2dBm(HT20 MCS7) 802.11n@2.4GHz:16dBm +/-2dBm(HT40 MCS7)		
Ambient Environment			
Storage Temperature	-40 ~ 85°C	Ambient Humidity	5 ~ 95% (non-condensing)
Operating Temperature	-20 ~ 70°C		
Indicator			
LED	SYS, CELLULAR, WIFI		
Certification			
CE			

IR202 Software Specifications	
Product	IR202
Network Connection	
Network Access	APN、VPDN, supports dual-APN access
Access Authentication	CHAP/PAP authentication
Network Type	
Network Type	GSM/GPRS/EDGE, UMTS/HSPA+/EVDO/TD-SCDM, TD-LTE/FDD LTE
LAN Protocol	ARP、Ethernet
WAN Protocol	Static IP, DHCP, PPPoE, PPP
IP Application	Ping, Trace, DHCP Server, DHCP Relay, DHCP Client, DNS relay, Telnet
IP Routing	Static routing
NAT	Support network address translation
Network Security	
Firewall	Stateful Packet Inspection (SPI), DoS attack defense Multicast filter/Ping packet, Access Control List (ACL) Content URL filter, port mapping, virtual IP mapping, IP/MAC binding
Access Security	Multi-level user authorization
Data Security	IPsec VPN
Reliability	
Link Detection	Send heartbeat packets, auto redial when disconnected
Embedded Watchdog	Device operation self-detection, auto recover from malfunctions
WLAN(Optional)	
Protocol & Standard	IEEE 802.11b/g/n
Transmission Rate	Supports 150Mbps
Security	Open system, shared key, WPA/WPA2 certification WEP/TKIP/AES encryption
Working Mode	AP and Client modes
Transmission Distance	100m (actual transmission distance depends on site environment)
Intelligence	
Integrated DTU Functions	TCP, UDP transparent transmission mode, TCP Server mode Supports conversion of Modbus RTU to Modbus TCP bridge; Supports DCUDP, DCTCP mode Supports for up to 15 data centers
Network Management	
Configuration Method	Telnet, web, ssh and console
Upgrade Method	Web, Device Manager
Logs	Local system logs, remote logs, and serial export of logs.
SMS Functions	Status query, configuration, restart
Dial-on-demand	Dial-on-demand, data / SMS activation
Network Management	Supports InHand Device Manager, batch management
Traffic Management	Supports data traffic threshold setting, supports traffic statistics and traffic alarm
Alarms	System restart alarm, LAN port online/offline alarm, data traffic alarm, SIM card failure alarm, etc.
Maintenance Tools	Ping, route tracking, network speed test
Status Query	System status, modem status, network connection status, and routing status

Ordering Guide

Model	Mode code : IR202-<WMNN>-<W/NA> <WMNN>: Cellular Type & Module	<W/NA>: WLAN
IR202-LQ20-<W/NA>	(LTE CAT4 For China) LTE-FDD Band 1/3/5/8 LTE-TDD Band 34/38/39/40/41 WADMA Band 1/5/8 GSM 900/1800MHz	W: Wi-Fi <NA>: no Wi-Fi
IR202-FQ58-<W/NA>	(LTE CAT4 For Europe & APAC) LTE-FDD Band 1/3/5/8/20/28A LTE-TDD Band 38/40/41 WADMA Band 1/8 GSM 900/1800MHz	W: Wi-Fi <NA>: no Wi-Fi

About Us

InHand Networks is a global leader of Industrial IoT, with a record of tremendous success following ground-breaking innovation since our inception in 2001.

InHand serves world-class partners and customers with industrial M2M routers, gateways, industrial Ethernet switches, rugged computers and IoT management platforms. We provide IoT solutions for various vertical markets including Smart Grid, Industrial Automation, Remote Machine Monitoring, Smart Vending, Smart City, Retail and more.

Proudly bearing the marks of both Rockwell Automation Encompass Product Partner in Asia-Pacific and Schneider Electric CAPP Technology Partner, InHand Networks defines industrial innovation and reliability.



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