

ComIn I2100

Industrial Grade 4G Wireless Router

Product Specifications



- High Performance 32bit Industrial Grade Processor
- Industrial Grade 4G LTE Cat4 Modem Performance
- 12VDC Power Input and Wide Power Input Range 6V~40V
- Automatic System Recovery From System Failures
- Industrial Grade Interfaces with full ESD protection
- Support VPN Client Functions
- Ruggedized Metal Casing and DIN-Rail Mountable
- Support 4G LTE FDD/TDD, 3G UMTS/HSPA, 2G GSM Bands

Product Description

In a networked world where everything is connected, the demand for smart communication will become much and much stronger, especially in the field of smart industrial application and control. The ComIn I2100 4G router is also a new generation 4G wireless VPN router launched by Shenzhen Movingcomm 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 ComIn I2100 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/UM card slot, which can have the serial port, Ethernet port, and Wi-Fi connected at the same time for enabling pass-through transmission.

The ComIn I2100 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, area exploration, agriculture, forestry, water affairs, coal mines, petrochemicals and other industrial fields.

Features

Ruggedized Industrial Design

ComIn I2100 is a performance industrial grade 4G wireless router based on a 32bit MIPS network processor with high speed cat4 4G LTE, 2 Ethernet port (1 WAN 1 LAN) and full speed 2.4GHz Wi-Fi that comply with IEEE 802.11n standard. The ComIn I2100 is a product protected from a ruggedized metal casing to give an excellent isolation protection from interference in the surrounding environment. It is suitable to utilize in industrial control field applications. Besides it takes standard 12VDC power input, it has more capability and can have wider power input range from 9~36VDC as well as reverse-voltage protection.

Robustness and Stability

ComIn I2100 has dual auto recovery mechanism from system failure. The hardware and software watchdog in the system ensure high system stability of the device in a long operation application. The device has a well-designed failsafe mechanism to take care of the WAN/Cellular connection, improving uplink time and preventing lost in communication. All the Ethernet ports have built-in 1.5KV magnetic isolation protection and the SIM holder has built in 15KV ESD protection, the power Input has reverse-voltage and surge protection as well as lightning protection (optional) in the antenna connectors.

Easy to Use

ComIn I2100 provides standard RS232/RS485, Ethernet, and Wi-Fi interfaces, which can make connections to a serial device, wired network device, and wireless devices via Wi-Fi. The wired WAN port supports standard PPPoE dialup protocol which can be directly connected to an ADSL modem or equipment. Furthermore, the ComIn I2100 is a smart data terminal device that can enter the data transmission mode after power on. It also supports a powerful and comprehensive cloud management platform that make multi-device management easier and very convenient (optional feature). The ComIn I2100 is easy to use, flexible, and support multiple working modes. It has convenient system configuration and system maintenance by local web access, remote access and cloud platform management.

Hardware Specifications

CPU	32-bit MIPS 24KEc Industrial Grade Chipset, Core Frequency 575/580MHz	
System Memory	64MB / Optional 128MB DDR2 RAM	
Flash	8MB / Optional 16MB SPI Flash	
Wi-Fi	Wi-Fi 4 (802.11n)	
	2.4GHz IEEE 802.11n MIMO up to 300Mbps	
	Detachable High Gain WIFI Antennas	
Interfaces	WAN	1 x 10/100Mbps FE RJ45 Port, auto MDI/X, with 1.5KV magnetic isolation protection
	LAN	1 x 10/100Mbps FE RJ45 Port, auto MDI/X, with 1.5KV magnetic isolation protection
	SERIAL	2.54 Standard Phoenix Style terminal Block Connector, Support RS232/RS485 Serial Connection. Include DC power Input Pin DI, DO
	SIM	1 x Drawer-Type SIM Card Holder, Support Standard 1.8V/3V USIM/SIM Card, 15KV ESD Protection
	Power	Standard DC Power Input Jack, reverse-voltage protection and surge protection
	Reset	1 x Reset Button
	WPS	1 x WPS Button
	Antenna	2 x Standard SMA Antenna Connector, 50 ohm (Cellular) 2 x Standard RP-SMA Antenna Connector, 50 ohm (WiFi)
Indicators	PWR LED Indicator x 1	
	SYS LED Indicator x 1	
	WIFI LED Indicator x 1	

	WAN LED Indicator x 1	
	LAN LED Indicator x 1	
	VPN LED Indicator x 1	
	NET LED Indicator x 1	
	SIM Card Status LED Indicator x 1	
	CELLULAR Signal Strength LED Indicator x 3	
EMC	EN61000-4-2, Level4	
	EN61000-4-3, Level4	
	EN61000-4-4, Level4	
	EN61000-4-5, Level3	
	EN61000-4-6, Level4	
	EN61000-4-8, Horizontal/Vertical 400A/m (>Level 4)	
	EN61000-4-12, Level4	
Power Input	Power Type	12VDC/1A
	Power Range	9~36VDC Wide Power Input
	Power Consumption	<450mA (12V), Average 170mA@12V
Hardware Watchdog	Support Device Operation Self-Check Technology, Auto Recovery From Device Failure (Optional)	
Enclosure	Ruggedized Metal Casing. The Casing and The System Are Safely Isolated, Especially Suitable for Industrial Control Field Applications.	
Product Dimensions	97mm x 112mm x 24mm (Excluding Antenna and Mounting Sets)	
Weight	Approx. 280g (Excluding Antenna and Mounting Sets)	
Environment	Operating Temperature: -35°C to 75°C	
	Storage Temperature: -40°C to 85°C	
	Operating Humidity: 10% to 95% RH Non-condensing	
	Storage Humidity: 5% to 95% RH Non-condensing	
Firmware	Linux SDK	

4G/3G/2G Cellular Specifications

LTE Category	LTE Cat 4
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Frequency*	CN Version	LTE-FDD: B1, B3, B5, B7,B8,B20 LTE-TDD: B34, B38, B39, B40, B41 WCDMA: B1, B5, B8 GSM: B3, B8
	EU Version	LTE-FDD: B1, B3, B5,B7, B8, B20, B28 LTE-TDD: B38, B40, B41 WCDMA: B1,B5, B8
	LATAM/AU Version (Custom)	LTE-FDD: B1, B2, B3, B4, B5, B7, B8, B28, B66 LTE-TDD: B40 WCDMA: B1, B2, B4, B5, B8 GSM: B2, B3, B5, B8
Data Rate	LTE	LTE-FDD: Max. 150 (DL)/ Max. 50 (UL) LTE-TDD: Max. 130 (DL)/ Max. 30 (UL)
	DC-HSPA+	Max. 21 (DL)/ Max. 5.76 (UL)
	WCDMA	Max. 384 (DL)/ Max. 384 (UL)
	EDGE	Max. 236.8 (DL)/ Max. 236.8 (UL)
	GPRS	Max. 85.6 (DL)/ Max. 85.6 (UL)
Transmitting Power	Class 4 (33dBm±2dB) for EGSM900 Class 1 (30dBm±2dB) for DCS1800 Class E2 (27dBm±3dB) for EGSM900 8-PSK Class E2 (26dBm±3dB) for DCS1800 8-PSK Class 3 (24dBm+1/-3dB) for WCDMA bands Class 3 (23dBm±2dB) for LTE-FDD bands Class 3 (23dBm±2dB) for LTE-TDD bands	

Note *: The information about the supported standards and wireless bands may vary with the application of 4G modules. Before ordering, please ask and confirm with our sales representatives whether or not the required network standards and wireless frequency bands are met.

Wi-Fi Specifications

Wi-Fi Technology	IEEE 802.11b/g/n
Channel Bandwidth	20MHz, 40MHz
Frequency	2.4GHz (2.412-2.4835GHz)
TX/RX	2.4GHz: 1T1R
MIMO	DL: 2X2 MIMO

Max Data Rate	802.11b: 11Mbps 802.11g: 54Mbps 802.11n: 300Mbps
Modulation	11b: DBPSK, DQPSK and CCK and DSSS 11g: BPSK, QPSK, 16QAM, 64QAM and OFDM 11n: MCS0~15 OFDM
Reception Sensitivity	-85dBm in 802.11b -70dBm in 802.11g -70dBm in 802.11n
Max. Output Power	17±2dBm in 802.11b 16±2dBm in 802.11g 15±2dBm in 802.11n
Antenna Type	External Antenna
Wi-Fi User Support	Max. 32 Users
Wi-Fi Encryption	WEP/WPA/WPA2 Protected Encryption

Software Specifications

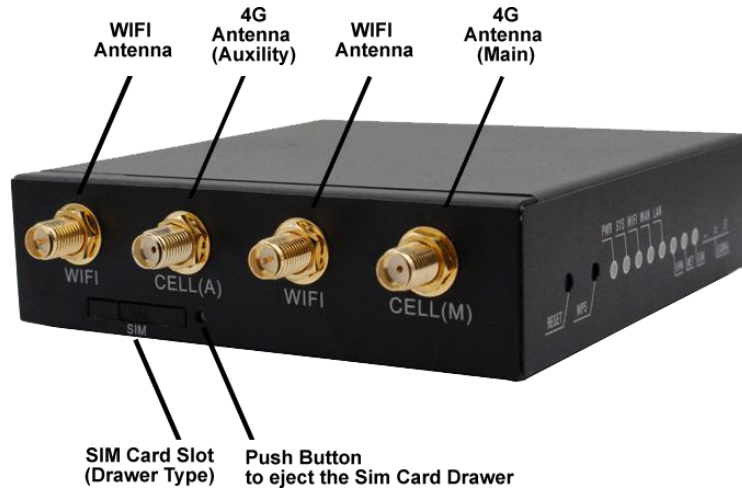
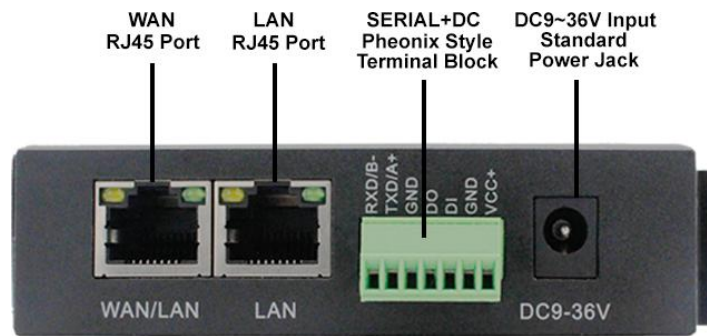
Main Features	WAN	Static IP, DHCP, PPPoE
		Support Links Redundancy, and WAN-WWAN Failsafe
		Link detection, Heartbeat detection, and auto reconnection
	WIFI	Client, AP, Router Mode
		Support WPA/WPA2 Encryption, MAC Filter and others
	VPN	Support VPN Client PPTP / L2TP
	Management	SYSLOG / HTTP / Other Functions
		Support Local or Remote Firmware Upgrade, Import / Export configuration file
		Support APN/VPDN
		Support IPv6
		Support NTP
		Support VLAN, MAC Address Clone
		Support Multiple DHCP Server, DHCP Client, DHCP and MAC Address Binding, DDNS, Firewall, DMZ, Traffic Statistics and others

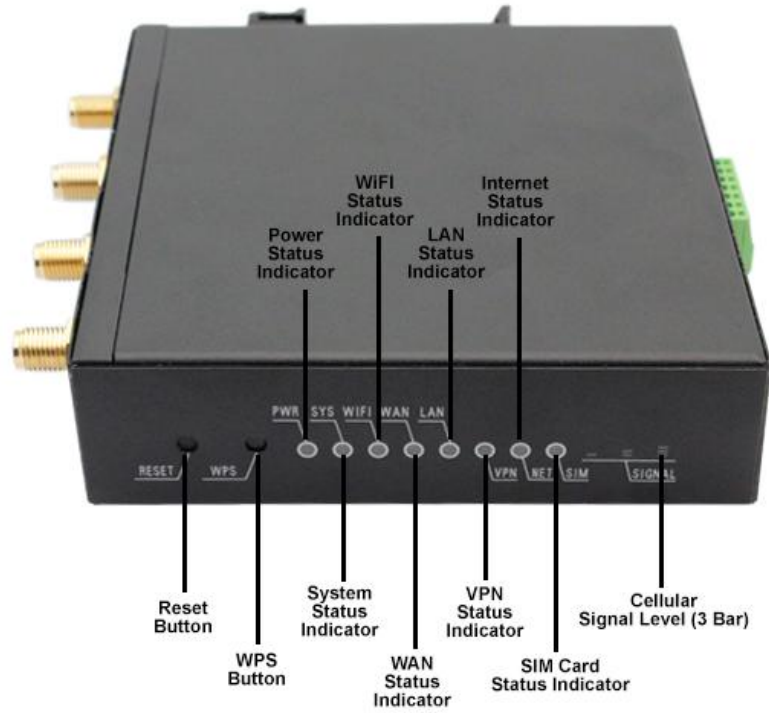
	Support TCP/IP, UDP, FTP(optional), HTTP and Other Network Protocols
	Support Multiple Serial Pass-through Method, UDP Client, TCP Client, Server

Product Views

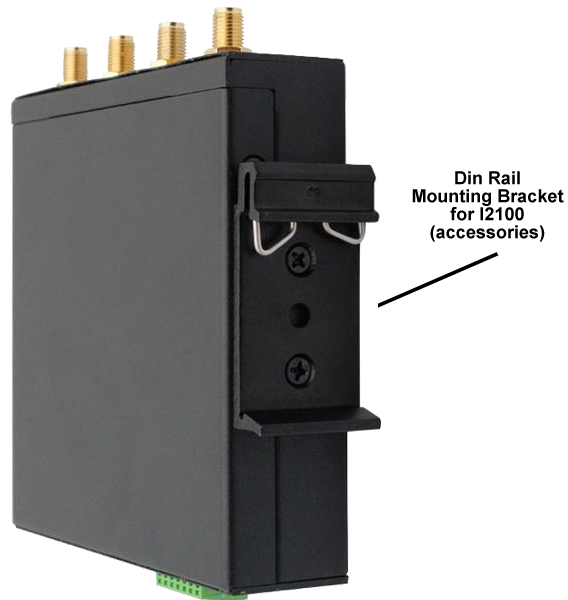


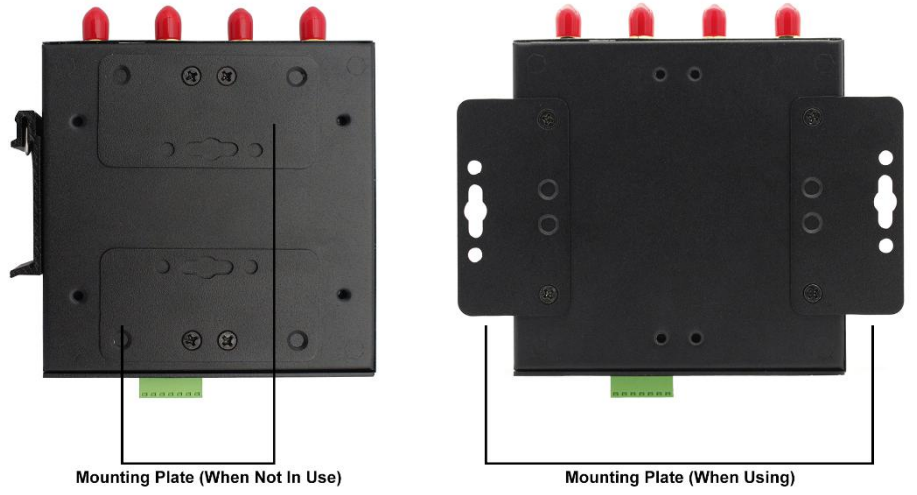
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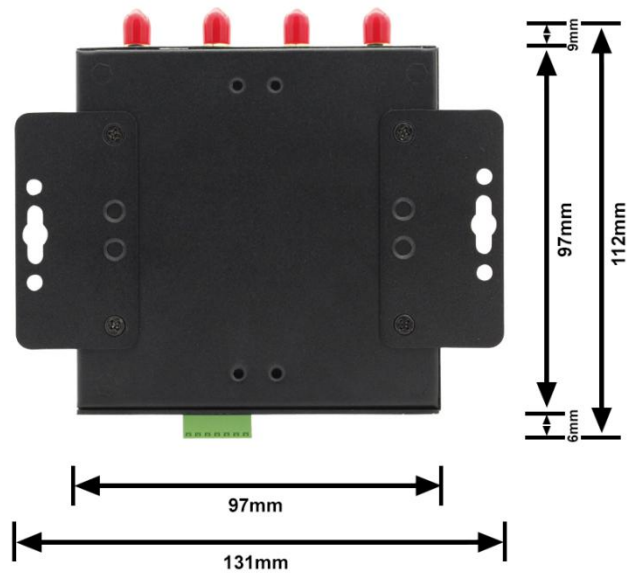
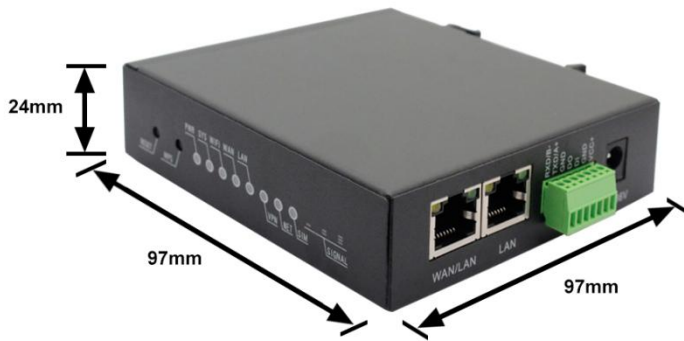


Mounting Options





Product Dimensions



Order Information

Product Model*	External Antenna	Modem	Ethernet
ComIn I2100 CN	Yes	China Version	1 WAN 1 LAN
ComIn I2100 EU	Yes	Europe Version	1 WAN 1 LAN
ComIn I2100 AU	Yes	Latin America / Australia Version	1 WAN 1 LAN

Product Packaging:

1 x I2100 Router Unit with 4G Modem

1 x AC/DC Power Adapter

1 x Network Cable

1 x Spring Magnetic Cellular Antenna (4G)

1 x Dipole Antenna (WiFi)

1 x Mounting Set

Default Router comes with only two SMA/RP-SMA connectors for single 4G antenna and single Wi-Fi antenna configuration. Additional SMA/RP-SMA connectors for secondary / auxiliary antenna can be done upon request.

** Different models and specifications correspond to different prices*

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