





robustel R1511 Dual Ethernet Router Instruction Manual

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robustel R1511 Dual Ethernet Router



Regulatory and Type Approval Information

Table 1: Toxic or Hazardous Substances or Elements with Defined Concentration Limits

Name of t	Hazaro	lous Subs	stances							
he Part	(Pb)	(Hg)	(Cd)	(Cr(VI))	(PBB)	(PBDE	(DEHP)	(BBP)	(DBP)	(DIBP)
Metal parts	X1,2	0	o	0	_	_	-	-	_	-
Circuit modules	0	0	o	0	0	0	0	0	0	0
Cables an d cable assemblies	0	O	o	o	О	0	o	0	0	O
Plastic and polymeric parts	0	O	0	o	o	0	О	o	О	o

o:

Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is be low the limit requirement in RoHS2.0.

X:

Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials for this part *might exceed* the limit requirement in RoHS2.0.

_.

Indicates that it does not contain the toxic or hazardous substance.

Note: Excessive lead can be exempted.

- 1. Copper alloy containing up to 4 % lead by weight (RoHS Exemption 6(c)).
- 2. Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound (ROHS Exemption 7(c)-I)

Radio Specifications for Europe

Model number: R1511-4L-A02EU

RF technologies	2G, 3G, 4G, Wi-Fi
	2G : GSM900/GSM1800
	3G : WCDMA: B1/B8
Cellular Frequency	4G : LTE FDD: B1/B3/B7/B8/B20/B28A
Genulal Trequency	LTE TDD: B38/B40/B41
WiFi Frequency	2412MHz ~ 2472MHz
Max RF power	33 dBm±2dB@GSM, 24 dBm+1/-3dB@WCDMA, 23 dBm±2dB@LTE, 18 dBm@Wi-Fi

Model number: R1511-4L-A24EU

RF technologies	2G, 3G, 4G, Wi-Fi
	2G : GSM900/GSM1800
	3G : WCDMA: B1/B5/B8
Cellular Frequency*	4G : LTE FDD: B1/B3/B5/B7/B8/B20/B28
	LTE TDD: B38/B40/B41
WiFi Frequency	2412MHz ~ 2472MHz
Max RF power	33 dBm±2dB@GSM, 24 dBm+1/-3dB@WCDMA, 23 dBm±2dB@LTE, 18 dBm@Wi-Fi

· May vary on difference models.

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s) and Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause interference.
- 2. This device must accept any interference, including interference that may cause undesired operation of the device.

FCC STATEMENT

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC& IC Radiation Exposure Statement

This equipment complies with FCC and Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Simplified EU & UK Declaration of Conformity

We, Guangzhou Robustel Co., Ltd. are located at 501, Building #2, 63 Yongan Road, Huangpu District, Guangzhou, China, declare that this radio equipment complies with EU Radio Equipment Directive (RED) 2014/53/EU, Low Voltage Directive (LVD) 2014/35/EU, EMC Directive 2014/30/EU, UK Radio Equipment Regulations 2017, EMC Regulations 2016, Electrical Equipment (Safety) Regulations 2016. The full text of the EU& UK DoC is available at the following internet address: www.robustel.com/certifications/

Safety Information

General

- The router generates radio frequency (RF) power. When using the router, care must be taken on safety issues related to RF interference as well as regulations of RF equipment.
- Do not use your router in aircraft, hospitals, petrol stations or in places where using cellular products is prohibited.
- Be sure that the router will not interfere with nearby equipment. For example, pacemakers or medical equipment. The antenna of the router should be away from computers, office equipment, home appliance, etc.
- An external antenna must be connected to the router for proper operation. Only uses approved antenna with the router. Please contact authorized distributor on finding an approved antenna.

RF Exposure

- This device meets the official requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by authorized agencies.
- The device must be used with a minimum separation of 20 cm from a person's body to ensure compliance with RF exposure guidelines. Failure to observe these instructions could result in your RF exposure exceeding the applicable limits.

Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground and the door is open. The router may be used at this time.



- The symbol indicates that the product should not be mixed with general household waste but must be sent to separate collection facilities for recovery and recycling.
- . CE The symbol indicates that the product meets the requirements of the applicable EU directives.



WARNING:

This product can expose you to chemicals including Lead, known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Related download link

Find more product documents or tools at: www.robustel.com/documentation/

Technical Support

• Tel: 400-987-3791

• Email: support@robustel.com

• Web: www.robustel.com

Document History

Updates between document versions are cumulative. Therefore, the latest document version contains all updates made to previous versions.

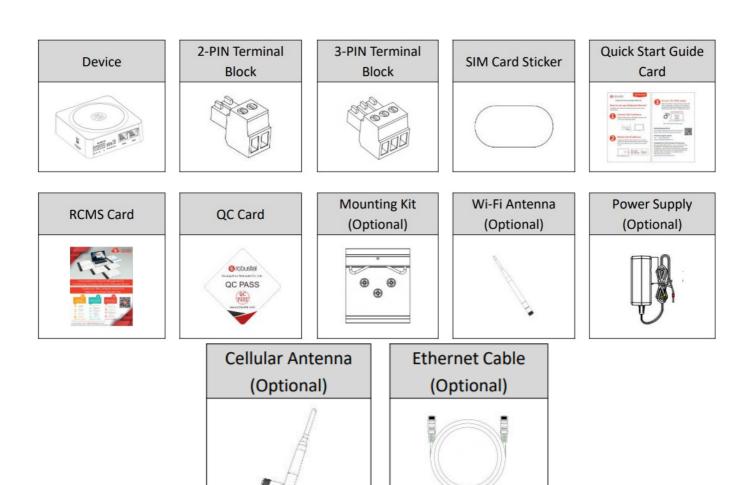
Date	Document Version	Change Description
July 6, 2022	1.0.0	Initial release.
Nov. 23, 2022	1.0.1	Added declaration for product.
July 14, 2023	1.0.2	Modified declaration for product.
June 21, 2024	1.0.3	Modified declaration for product and Added new model for EU.

Overview

Robustel R1511 industrial-grade cellular VPN wireless router supports GSM 2G network, WCDMA 3G network, LTE 4G network to provide high-speed wireless network bandwidth for devices through wireless connection.

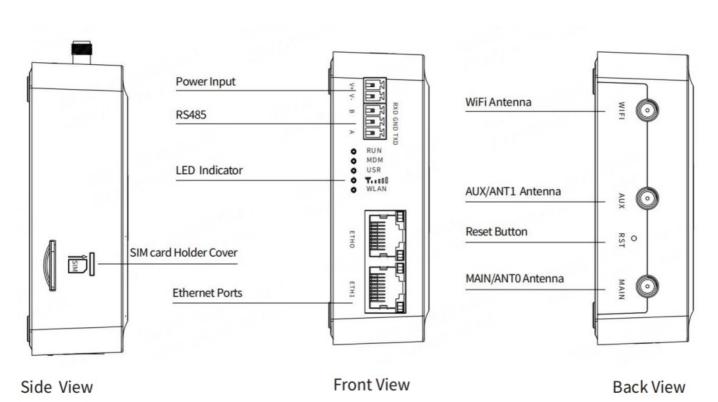
Package Checklist

Before commencing installation ensure your package has the following components:



Note: The accessories could be different on specific order.

Panel Layout (May Vary on Difference Models)



PIN Description

PIN	Description	Note	
1	V+	Power Supply Positive	1 2
2	V-	Power Supply Negative	Note: 1) The input voltage is 9 to 36V DC (Without ignition sensing)
3	RXD/B	RS232 Data Receive/RS485_B, may vary on different model.	3 4 5
4	GND	Signal Ground	RXD GND TXD
5	TXD/A	RS232 Data Transmission/RS485_A, may vary on different model.	B A

LED Indicator

Name	Color	Status	Description
		On, solid	The router is powered on (System is initializing)
RUN	Green On, blinking The router starts operating	The router starts operating	
		Off	The router is powered off
		On, solid	The link connection is working
MDM	Green	On, blinking	Data is sent and received.
		Off	Link connection is not working
		On, solid	Received Signal Strength Indication 20 to 31 dB (Strong signal)
RSSI	Green	On, blinking	Received Signal Strength Indication 10 to 19 dB (Moder ate signal)
	Off No signal or Received Signal Strength dB (Weak signal)	No signal or Received Signal Strength Indication 1 to 9 dB (Weak signal)	
		On, solid	Wi-Fi is enabled and working properly
WLAN	Green	On, blinking	Data is being transferred
		Off	Wi-Fi is disabled or not working properly
		User-defined LED. nection status, or s	It can be used to indicate SIM card, OpenVPN, IPSec constatus in
USR	Green	self-developed app or more details, ple	olications. You can choose the display type of USR LED. Flease refer to
			stOS Software Manual: Services > Advanced > Settings > User LED Type.

Reset Button

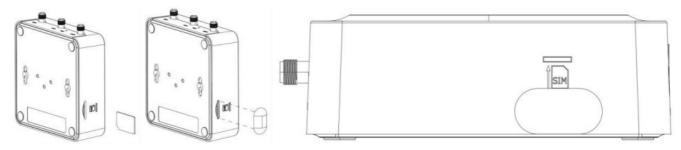
Feature	Operation
Reboot	Press and hold the RST button for 2~ 5 seconds under the operating status.
Restore to default configuration	Press and hold the RST button for 5~10 seconds, the RUN LED starts blinking quickly, the r outer will restore to default configuration.
Restore to factory default settings	Once the operation of restoring default configuration is performed twice within one minute, t he router will restore to factory default settings.
Note: The more de	tails please refer to RT123_SM_RobustOS Software Manual, 2.3 Factory Reset.

Ethernet Ports. There are two Ethernet ports on R1511, including ETH0 (WAN/LAN), and ETH1. Each has two LED indicators. The green one is a link indicator but the yellow one doesn't mean anything (always off). For details about status, see the table below.

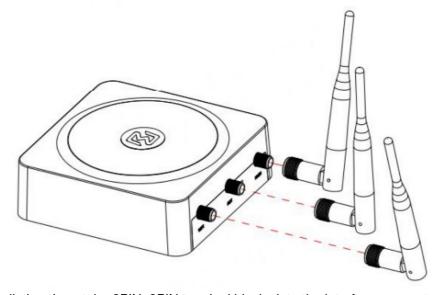
ETH LED Indicat or	Status	Description
	On, solid Connection is established	Connection is established
Link indicator (Gr een)	On, blinking	Data is being transferred
	Off	Connection is not established

Hardware Installation

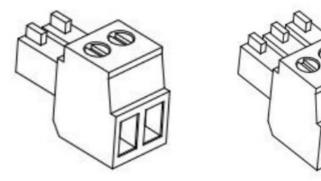
1. SIM Card Installation. Insert the SIM cards into the device, then stick the sticker.



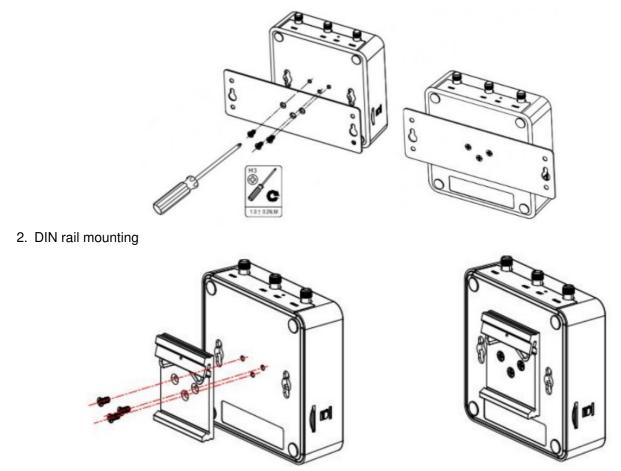
2. Antenna Installation. Rotate the antenna into the antenna connector accordingly.



3. Terminal Block Installation. Insert the 2PIN, 3PIN terminal blocks into the interface connector.



- 4. Mounting Kit installation
 - 1. Wall mounting



5. Connect the Router to a Computer

Connect a standard Ethernet cable to the port marked ETH0~ETH1 at the front of the R1511 Router, and connect the other end of the cable to your computer.

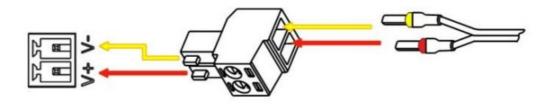


6. Power Supply installation. There are two cables associated with the power adapter. Following to the color of the head, connect the cable marked red to the positive pole through a terminal block, and connect the yellow one to the negative in the same way.

Note: The range of power voltage is 9 to 36V DC.

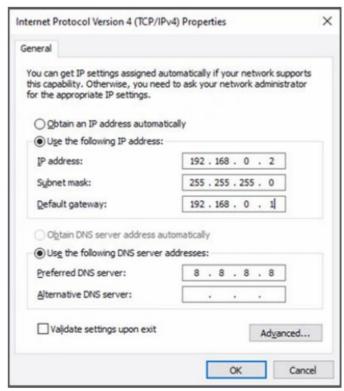
CONNECTING THE POWER CABLE

COLOR	POLARITY
RED	+
YELLOW	-



Login to the Device

- 1. Connect the router's Ethernet port to a PC with a standard Ethernet cable.
- 2. Before logging in, manually configure the PC with a static IP address on the same subnet as the gateway address, click and configure "Use the following IP address".



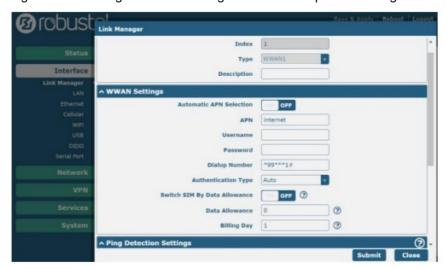
- 3. To enter the gateway's web interface, type http://192.168.0.1 into the URL field of your Internet browser.
- 4. Use login information shown in the product label when prompted for authentication.



5. After logging in, the home page of the web interface is displayed, then you can view system information and perform configuration on the device.



6. The automatic APN selection is ON by default, if need to specify your own APN, please go to the menu Interface->Link Manager->Link Setting->WWAN Settings to finish the specific setting.



- 7. The more configuration details please refer to RT123_SM_RobustOS Software Manual. (END)
- Support: support@robustel.com
- Website: www.robustel.com
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FAQs

Q: Where can I find more product documents or tools?

A: You can find additional product resources at www.robustel.com/documentation/.

Q: How do I contact technical support?

A: For technical support, you can reach out by phone at <u>400-987-3791</u>, via email at <u>support@robustel.com</u>, or visit the website at <u>www.robustel.com</u>.

Documents / Resources



robustel R1511 Dual Ethernet Router [pdf] Instruction Manual

R1511-4L-A02EU, R1511-4L-A24EU, R1511 Dual Ethernet Router, R1511, Dual Ethernet Router, Ethernet Router

References

- 2 4G/LTE/5G/Cellular Routers, Gateways and Modems for Industrial IoT Robustel
- @ Certifications | Robustel Industry-leading IoT Solutions Provide
- User Manual

Manuals+, Privacy Policy

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