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R1511

Industrial Cellular VPN Router

2 x Ethernet + 2 x Wi-Fi + 1 x SIM + 1 x RS-232/RS-485



INTRODUCTION

The Robustel's R1511 router is a Dual Ethernet port (LAN + WAN) 2G/3G/4G/LTE router equipped with advanced software functionalities at a highly competitive price point. The R1511 is a sister product of the R1510 series, offering a choice of (3-wire) RS-232 or (2-wire) RS-485 instead of the digital input and digital output found on the R1510 series. This allows RS-232 and RS-485 devices, including Modbus RTU equipment, to connect directly to the internet through the R1511 router. Ethernet port 0 can be independently configured as WAN, LAN1, or LAN2, while Ethernet port 1 can function as either LAN1 or LAN2.

At the core of all Robustel routers is the **RobustOS** operating system. With five years of development and innovative features, RobustOS delivers a professional product with an intuitive graphical user interface and the connection stability required for critical IoT applications. The router's compact design makes it ideal for space-constrained applications such as bus signs, ticketing machines, vending machines, covert surveillance, and digital signage.

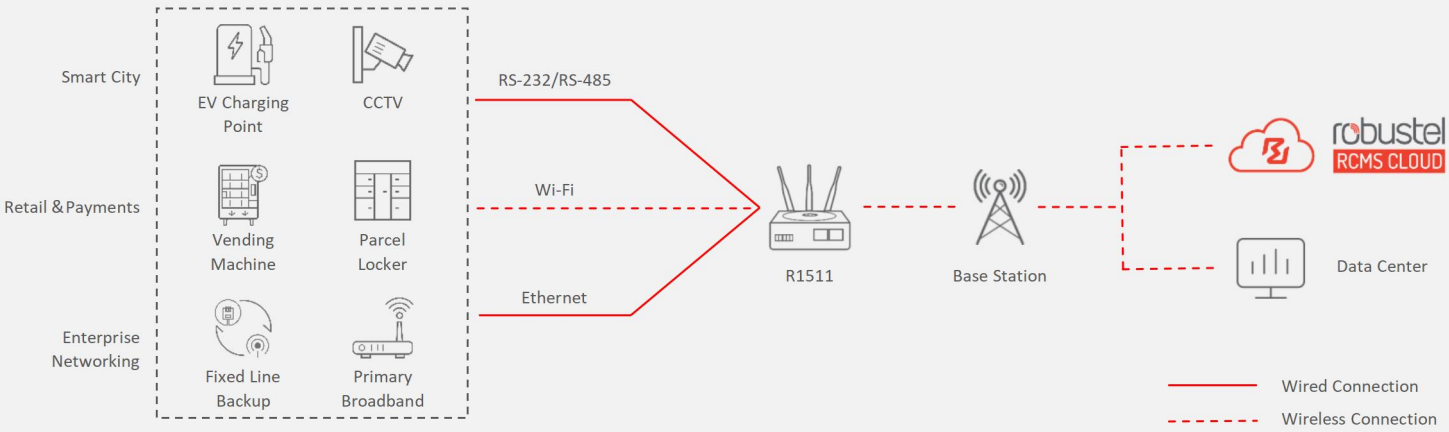
The **Robustel Cloud Manager Service (RCMS)** is a unified cloud-based platform designed for real-time monitoring and centralized management of industrial IoT devices. Fully compatible with Robustel routers and gateways, RCMS delivers an interactive geospatial dashboard that enables users to visualize device locations and track critical metrics such as data usage, signal strength, and network status. To ensure seamless operations, the platform facilitates over-the-air (OTA) updates for firmware, configurations, and applications, minimizing downtime while optimizing system performance. Experience robust, cloud-native device management by registering at:
https://rcms-cloud.robustel.net

robustel RCMS CLOUD

KEY FEATURES

- Dual Ethernet ports with a choice of RS-232 or RS-485
- Built-in Modbus RTU to Modbus TCP gateway
- Ethernet, Wi-Fi, and 4G internet connection options with automatic failover
- Free cloud management platform - RCMS
- Fully programmable Linux environment with comprehensive SDK documentation
- RobustVPN provides a fixed IP address on any SIM card
- Full SMS control for diagnostics and recovery from data network issues
- Extremely compact design for space-constrained applications
- Wall-mount and DIN-rail mounting options available

APPLICATION EXAMPLE



SPECIFICATIONS

Hardware System

CPU	MIPS, 650 MHz
RAM	128 MB
Flash	16 MB

Cellular Interface

Number of antennas	2 x external antennas (MAIN + AUX)
Connector	SMA-K
SIM	1 x Mini SIM (2FF)

Ethernet Port

Number of ports	2 x 10/100 Mbps
	2 x LAN or 1 x LAN + 1 x WAN
Magnet isolation protection	1.5 KV

Serial Port

Number of ports	1 x RS-232 or 1 x RS-485 (hardware configuration)
Connector	3-pin 3.5 mm female socket
Baud rate	300 bps ~ 115200 bps

Wi-Fi Interface

Number of antennas	2 (1 x external antenna + 1 x PCB antenna)
Connector	RP-SMA-K (external antenna)
Standards	802.11 b/g/n, supporting AP and Client modes
Frequency bands	2.4 GHz
Security	WEP, WPA, WPA2, WPA3
Encryption	64/128 AES, TKIP

Others

Reset button	1 x RST
LED indicators	1 x RUN, 1 x MDM, 1 x USR, 1 x RSSI, 1 x WLAN
Watchdog	Built-in

Power Supply and Consumption

Connector	2-pin 3.5 mm female socket
Input voltage	12/24 V DC, 9 ~ 36 V DC
	Reverse polarity protection, surge protection
Power consumption	Idle: 1.5 W@12 V
	Max: 6 W@12 V
Recommended power supply	12 V DC/1.0 A power adapter

Physical Characteristics

Ingress protection	IP30
UL 94	V-0, 5 VB
Housing & Weight	Plastic, 150 g
Dimensions	31.5 x 91.5 x 91.5 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting
Operating temperature	-25 ~ +70 °C
Storage temperature	-40 ~ +85 °C
Relative humidity	5 ~ 95% RH (non-condensing)

Software (Basic features of RobustOS)

Network protocols	PPPoE, TCP, UDP, DHCP, NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
VPN tunnels	IPsec, OpenVPN, GRE, WireGuard
Firewalls	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control
Remote management	Web, CLI, SMS
Serial port protocols	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway
Routing	Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2)

SDK

Supported programming languages	C, C++
Flash available for SDK	4 MB
RAM available for SDK	64 MB

App Center (Available Apps for RobustOS)

Apps*	L2TP, PPTP, DMVPN, VRRP, Captive Portal, WLAN Multi AP, SNMP, Language, RCMS, etc.

**Request on demand. For more Apps please visit www.robustel.com.*

Cloud Platform

Robustel Cloud Manager Service (RCMS)	RobustLink, RobustVPN, Operation Console

Regulatory and Type Approvals

Environmental	RoHS2.0
EMI	EN 55032 Conducted Emission Class B EN 55032 Radiated Emission Class B
EMS	EN 61000-4-2 (ESD) Contact Level 2, Air Level 3 EN 61000-4-3 (RS) Level 2 EN 61000-4-4 (EFT) Level 2 EN 61000-4-5 (Surge) Level 3 EN 61000-4-6 (CS) Level 2

ORDERING INFORMATION

Model	Order Code	Serial Port	Frequency Bands**	Country /Region	Certification	Package Contains
R1511-4L-A02EU-A	A006100720	RS-232	4G: LTE FDD: B1/3/7/8/20/28A 3G: WCDMA: B1/8 2G: GSM: B3/8 -	EMEA+SEA	CE, UKCA, CB, SIRIM	1 x R1511 Router (B Code: B061701)
	A006100721					1 x R1511 Router (B Code: B061701) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter
	A006100713					1 x R1511 Router (B Code: B061701)
R1511-4L-A02EU-B	A006100722	RS-485				1 x R1511 Router (B Code: B061702)
	A006100723				CE, UKCA, CB	1 x R1511 Router (B Code: B061702) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter
	A006100714					1 x R1511 Router (B Code: B061702)
R1511-4L-A03AU-A	A006100724	RS-232	4G: LTE FDD: B1/2/3/4/5/7/8/28 LTE TDD: B40 3G: WCDMA: B1/2/5/8 2G: GSM: B2/3/5/8	ANZ+LATAM	RCM, Telstra	1 x R1511 Router (B Code: B061703)
	A006100725					1 x R1511 Router (B Code: B061703) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter
R1511-4L-A03AU-B	A006100726	RS-485				1 x R1511 Router (B Code: B061704)
	A006100727					1 x R1511 Router (B Code: B061704) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter
R1511-4L-A05NA-A	A006100728	RS-232	4G: LTE FDD: B2/4/5/12/13/14/66/71 3G: WCDMA: B2/4/5	US+CA	FCC, IC	1 x R1511 Router (B Code: B061709)
	A006100729					1 x R1511 Router (B Code: B061709) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter

Model	Order Code	Serial Port	Frequency Bands**	Country /Region	Certification	Package Contains
R1511-4L-A05NA-B	A006100730	RS-485	4G: LTE FDD: B2/4/5/12/13/14/66/71 3G: WCDMA: B2/4/5 -	US+CA	FCC, IC, PTCRB, AT&T, Verizon, US Cellular	1 x R1511 Router (B Code: B061710)
	A006100731					1 x R1511 Router (B Code: B061710) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter

***For more information about frequency bands in different countries, please contact your Robustel sales representative.*

Email: info@robustel.com
Website: www.robustel.com
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