



R1511 robustOS

Industrial Cellular VPN Router

2 Ethernet + Wi-Fi + 1 SIM + 1 RS232/RS485



INTRODUCTION

Robustel’s R1511 router is a Dual Ethernet port (LAN + WAN) 2G/3G/4G/LTE router with advanced software functions at a very competitive price point.

The R1511 is a sister product of the R1510 series offering a choice of (3-wire) RS232 or (2-wire) RS485 INSTEAD of the Digital Input and Digital Output found on R1510 series. This means that RS232 and RS485 devices, including Modbus RTU equipment can connect to the internet directly through the R1511 router. Ethernet port 0 can be independently configured as WAN, LAN1 or LAN2 and Ethernet port 1 as LAN1 or LAN2.

At the heart of all of Robustel’s routers is the “RobustOS” operating System. With 5 years of maturity and innovative features, RobustOS offers customers a very professional product with an easy to navigate Graphical User Interface and the connection stability required by critical IoT applications. The router occupies a very small footprint which is useful for space-constrained applications such as bus signs, ticketing machines, vending machines, covert surveillance & digital signage applications.

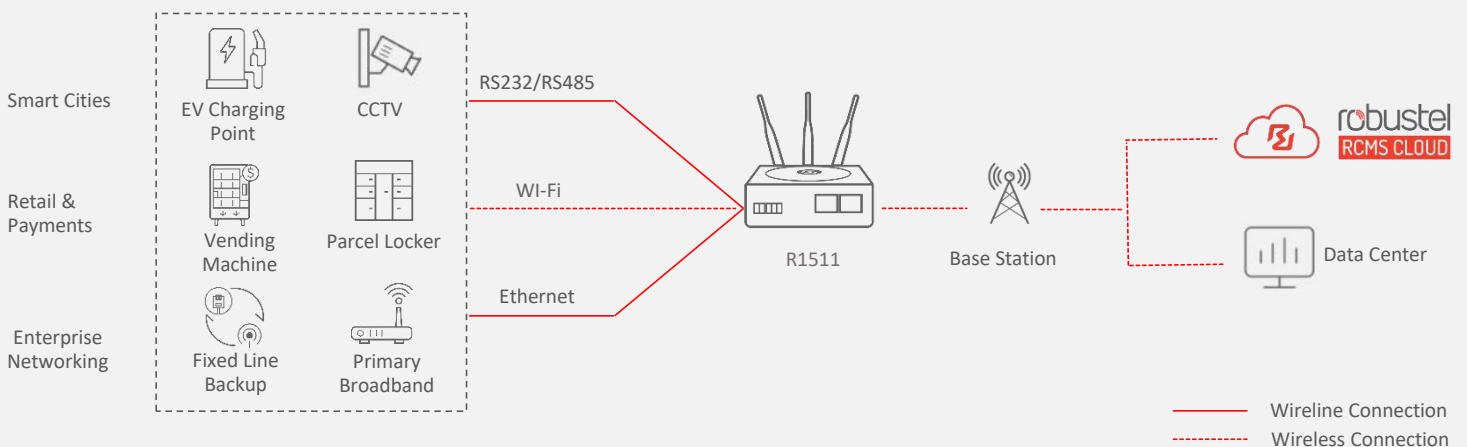
RCMS is Robustel’s free router monitoring service that is fully compatible with the R1511. You can try Robustel’s free router management platform by signing up here: <https://rcms-cloud.robustel.net>

KEY FEATURES

- Dual Ethernet and choice of RS232 or RS485 port
- Modbus RTU to Modbus TCP Gateway built-in
- Ethernet, Wi-Fi and 4G internet connection options with auto-failover
- Free cloud management platform – RCMS
- Fully programmable Linux environment with excellent SDK Documentation
- RobustVPN provides fixed IP address on ANY SIM card
- Full SMS control for diagnosis and recovery from data network problems
- Very small footprint for space-constrained applications
- Wall-mount and DIN-rail mounting options available



APPLICATION EXAMPLE



SPECIFICATIONS

Cellular Interface	
Number of antennas	2 External antennas (MAIN + AUX)
Connector	SMA-K
SIM	1 Mini SIM (2 FF)

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

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

Serial Interface	
Type	1 x RS232 or 1 x RS485 (Hardware configuration)
Connector	3-pin 3.5 mm female socket
Baud rate	300 bps ~ 115200 bps

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

Software (Basic features of RobustOS)	
Network protocols	PPPoE, TCP, UDP, DHCP, NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
VPN tunnel	IPsec, OpenVPN, GRE, Wireguard
Firewall	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control
Remote management	Web, CLI, SMS

App Center (Available Apps for RobustOS)	
Apps*	L2TP, PPTP, DMVPN, VRRP, QoS, Captive Portal, WLAN Multi AP, SNMP, Language, RCMS

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

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

Power Supply and Consumption	
Connector	2-pin 3.5 mm female socket
Input voltage	9 ~ 36 VDC
Power consumption	Idle: 100 mA@12 V Data link: 500 mA (peak) @12 V

Physical Characteristics	
Ingress protection	IP30
Housing & Weight	Plastic, 150 g
UL 94	V-0, 5 VB
Dimensions	91.5 x 91.5 x 31.5 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

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 Level3 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	PN	Serial Port	LTE Category	Frequency Bands*	Country/Region	Certification (* In progress)
R1511-4L-A02EU-A	B061701	RS232	CAT4	4G: LTE FDD: B1/B3/B7/B8/B20/B28A 3G: WCDMA: B1/B8 2G: GSM: B3/B8	EMEA	CE, UKCA
R1511-4L-A02EU-B	B061702	RS485				CE, UKCA, SIRIM*
R1511-4L-A03AU-A	B061703	RS232	CAT4	4G: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40 3G: WCDMA: B1/B2/B5/B8 2G: GSM: B2/B3/B5/B8	Oceania	RCM
R1511-4L-A03AU-B	B061704	RS485				
R1511-4L-A04JP-A	B061711	RS232	CAT4	4G: LTE FDD: B1/B3/B8/B18/B19/B26 LTE TDD: B41 3G: WCDMA: B1/B6/B8/B19	Japan	Telec, JATE
R1511-4L-A04JP-B	B061712	RS485				
R1511-4L-A05NA-A	B061709	RS232	CAT4	4G: LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 3G: WCDMA: B2/B4/B5	North America	FCC, IC
R1511-4L-A05NA-B	B061710	RS485				FCC, IC, PTCRB, AT&T, Verizon
R1511-4L-A24EU-A	B061741	RS232	CAT4	4G: LTE FDD: B1/B3/B5/B7/B8/B20/B28 LTE TDD: B38/B40/B41 3G: WCDMA: B1/B5/B8 2G: GSM/EDGE: B3/B8	EMEA, SEA	CE

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