R1510 Lite robustOS

Industrial Cellular VPN Router

1 Ethernet + 1 SIM

INTRODUCTION

Robustel's R1510 Lite router is a 3G/4G router with advanced software functions at a very competitive price point.

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.

The R1510 Lite has many unique software innovations including, but not limited to:
RobustVPN – innovative use of Open VPN tunneling to provide a fixed IP address on ANY SIM Card.
RCMS – Robustel's Cloud management platform – essential for managing an estate of routers – Basic version FREE.
Data Guard – critical 'failsafe' that stops unexpected data overusage within seconds of a threshold being breached.
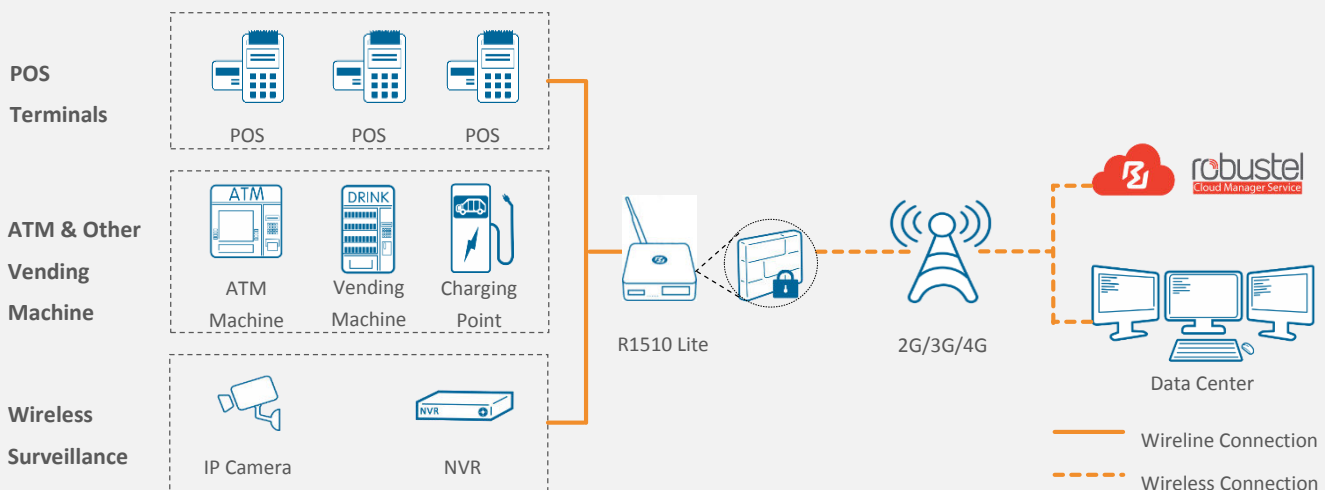Smart Reboot – essential backup solution for when your roaming SIM card doesn't roam!

Robustel is a leading global industrial IoT/M2M hardware and solution provider. Since inception in 2010, Robustel has focussed on manufacturing and design of industrial cellular routers, gateways, modems, cloud platforms and end to end solutions. Robustel has set up local offices in Germany, Australia, the Netherlands, UK, Japan and Hong Kong and has a global distribution network providing a service in over 100 countries.

KEY FEATURES

- Highly stable 2G/3G/4G cellular connections
- Ethernet and 4G internet connection options with auto-failover
- Free cloud management platform – RCMS
- Fully programmable Linux environment with excellent SDK Documentation
- 'Smart Reboot' for enhanced roaming SIM management
- 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	1 external antenna (MAIN)
Connector	SMA-K
SIM	1* (3 V & 1.8 V) Standard SIM or eSIM

Ethernet Interface

Number of ports	1 x 10/100 Mbps, 1 x LAN
Magnet isolation	1.5 KV

Others

Reset button	1 x RST
LED indicators	1 x RUN, 1 x MDM, 1 x USR, 1 x RSSI, 1xWLAN (Reserved)
Built-in	Watchdog, Timer

Power Supply and Consumption

Connector	2-pin 3.5 mm female socket
Input voltage	9 to 36V DC
Power consumption	Idle: 100 mA@12 V
	Data link: 500 mA (peak) @12 V

Physical Characteristics

Ingress protection	IP30
Housing & Weight	Plastic, 150 g
Dimensions	91.5 x 91.5 x 31.5 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting
Operating Temperature	-25 to +70 °C
Storage Temperature	-40 to +85 °C
Relative Humidity	5 to 95% RH

Software (Basic features of RobustOS)

Network protocols	PPPoE, DHCP , NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
VPN tunnel	IPsec, OpenVPN, GRE
Firewall	DMZ, anti-DoS, Filtering (IP/Domain name/ MAC address), Port Mapping, Access Control
Management	Web, CLI, SMS

SDK

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

App Center (Available Apps for RobustOS)

Apps*	L2TP, PPTP, DMVPN, VRRP, QoS, Captive Portal, WLAN Multi AP, SNMP, Language, RCMS, Data Guard v2

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

Approvals

EMI	EN 55032: 2012/AC: 2013 (CE) Class B
	EN 55032: 2012/AC: 2013 (RE) Class A
EMS	IEC 61000-4-2 (ESD) Contact Level 2;
	IEC 61000-4-3 (RS) Level 2
	IEC 61000-4-4 (EFT) Level 2
	IEC 61000-4-5 (Surge) Level 2
	IEC 61000-4-6 (CS) Level 2

*(In progress)

*See ordering information for details about other certifications

ORDERING INFORMATION

Model	LTE Category	Frequency Bands*			Region/ Country	Certification (* In progress)
		4G	3G	2G		
R1510L-4L-A02EU	CAT4	LTE FDD: B1/B3/B7/B8/B20/B28A	WCDMA: B1/B8	GSM: B3/B8	EMEA	CE*
R1510L-4L-A03AU	CAT4	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40	WCDMA: B1/B2/B5/B8	GSM: B2/B3/B5/B8	Oceania	
R1510L-4L-A07CN	CAT4	LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/B38/B39/B40/B41	WCDMA: B1/B8	GSM: B3/B8	China/India	
R1510L-4E-A10CN	CAT1	LTE-FDD: B1/B3/B5/B8 LTE-TDD: B34/B38/B39/B40/B41		GSM: B3/B8	China	

* Please note that the different LTE frequency bands are model dependent and not all 4G frequencies are currently supported on a single model of R1510 Lite router.

* Please contact your sales representative for more detailed information on model numbers and for availability of "Global" routers.