

R1510

robustos

Industrial Cellular VPN Router 2 Eth + 1 SIM+1DI+1DO



INTRODUCTION

The Robustel Industrial Cellular VPN Router (R1510) is a rugged cellular router offering state-of-the-art mobile connectivity for machine to machine (M2M) applications.

R1510 is a powerful router developed from **RobustOS**, a Robustel self-developed and Linux-based operating system which is designed to be used in Robustel devices. The RobustOS includes basic networking features and protocols providing customers with a very good user experience. Meanwhile, Robustel offers a **Software Development Kit** (SDK) for partners and customers to allow additional customization by using C, Python or Java. It also provides rich **Apps** to meet fragmented IoT market demands.

Robustel is a leading global industrial IoT/M2M hardware and solution provider. Since its establishment in 2010 in Guangzhou, China, Robustel has been focusing on designing and manufacturing industrial cellular routers, gateways, modems, cloud platforms and E2E solutions. In order to support global business in more than 100+ countries and regions, Robustel has set up local offices in Germany, Australia, the Netherlands, the UK, Japan and Hong Kong.

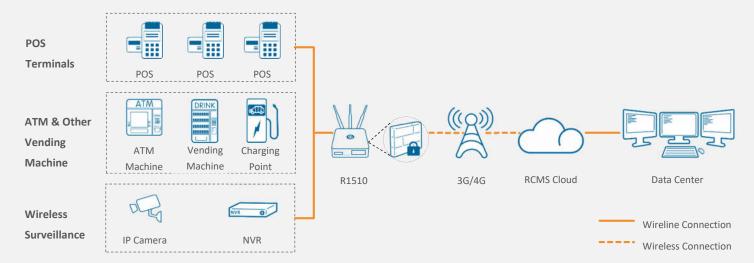
CERTIFICATIONS

CE,RCM, CCC(in plan)

KEY FEATURES

- Support continuous 2G/3G/4G cellular network connections
- The feature *Link Manager* supports
 Cellular WAN, Ethernet WAN, WLAN
 WAN link backup and ICMP detection
- WAN Static/PPPoE/DHCP Client
- RobustOS + SDK + App
- IPsec/OpenVPN/GRE/L2TP/PPTP/ DMVPN
- Management and maintenance via Web/CLI/SMS/RCMS Cloud
- Auto reboot via SMS/Timing
- Robust industrial design (9 to 26V DC, desktop or wall mounting or DIN rail mounting)

APPLICATION EXAMPLE



SPECIFICATIONS

Cellular Interface

Number of antennas 2 external antenna(MAIN + AUX)

Connector SMA-K

SIM 1 (3 V & 1.8 V) Standard SIM, eSIM optional

Ethernet Interface

Number of ports 2 x 10/100 Mbps, 2 x LAN or 1 x LAN + 1 x WAN

Magnet isolation 0.5 KV

WiFi Interface

Number of antennas 1 external antenna+ 1 internal PCB antenna

Connector RP-SMA-K (external antenna)

Standards 802.11b/g/n, supports AP and Client modes

Frequency bands 2.4 GHz

Security WEP, WPA, WPA2
Encryption 64/128 AES, TKIP
Data speed 2*2 MIMO, 300 Mbps

RF output power 802.11b 19 dBm 802.11g 19 dBm (+/-1 dBm)802.11n (20 MHz) 18 dBm 802.11n (40 MHz) 17 dBm Receiving sensitivity 802.11b -93 dBm (+/-1 dBm) 802.11g -90 dBm

DI/DO

Type $1 \times DI$ (wet contact) + $1 \times DO$ (wet contact)

802.11n (20 MHz)

802.11n (40 MHz)

-88 dBm

-85 dBm

Connector 3-pin 3.5 mm female socket

Absolute maximum VDC 30V DC (DI/DO)

Absolute maximum ADC 20mA

Others

Reset button 1 x RST

LED indicators $1 \times RUN, 1 \times MDM, 1 \times USR, 1 \times RSSI, 1 \times WiFi$

Built-in Watchdog, Timer

Software (Basic features of RobustOS)

Network protocols PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP,

HTTPs, DNS, ARP, 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

App Center (Available Apps for RobustOS)

Apps* L2TP, PPTP, DMVPN, RobustVPN, VRRP, QoS,

Captive Protal, WLAN Multi AP, SNMP,

Language, RobustLink

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

Power Supply and Consumption

Connector 2-pin 3.5 mm female socket

Input voltage 9 to 26V DC
Power consumption Idle: 100 mA@12 V

Data link: 500 mA (peak) @12 V

Physical Characteristics

Ingress protection IP30

Housing & Weight Plastic, 200 g
Dimensions 91.5 x 91.5 x 30.8mm

Installations Desktop, wall mounting and 35 mm DIN rail

mounting

Regulatory and Type Approvals

Regulatory: CE, RCM,CCC(in plan)

Environmental: RoHS, WEEE

EMI EN 55032: 2012/AC: 2013 (CE & 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

ORDERING INFORMATION

Model	R1510-4L
Router Type	LTE Router
Air Interface	GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA/HSPA+/DC-HSPA+/
	TD-SCDMA/CDMA (CDMA 1X/EVDO)/FDD LTE/TDD LTE/
Frequency Bands	EU: B1/B3/B7/B8/B20/B28
	AU+LATAM: B1/B3/B5/B7/B8/B28, B40
4G*	CN+IN: B1/B3/B5/B8, B34/B38/B39/B40/B41
3G	WCDMA/HSDPA/HSUPA/HSPA+/DC-HSPA+: B1/B2/B5/B8
	TD-SCDMA: B34/B39
	CDMA (CDMA 1X/EVDO):BCO
2G	B3/B8
Operating Environment	-25 to +70 °C/5 to 95% RH

^{*}For more information about 4G frequency bands in different countries, please contact your Robustel sales representative.

