

R1500 robustOS

Industrial Cellular IoT Gateway
1 Eth + 2 RS232



INTRODUCTION

R1500 industrial cellular IoT gateway supports GSM/GPRS/EDGE 2G network, WCDMA and other 3G networks, HSPA+ 3.5 G and LTE 4G network. It provides high speed wireless network bandwidth for device by wireless connection, and with dual-SIM backup to ensure the stable connection of wireless network

R1500 is a powerful gateway 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, C++. It also provides rich **Apps** to meet fragmented IoT market demands.

RCMS is Robustel's free router monitoring service that is fully compatible with the R1500. It allows customer to see a location overview of their routers quickly and simply on a map. Features such as data usage, signal strength, current network and much more can then be viewed on a per router basis. Over-the-air updates are supported for Firmware, router configuration and Apps serving as essential 'insurance' if anything was not quite right during deployment.

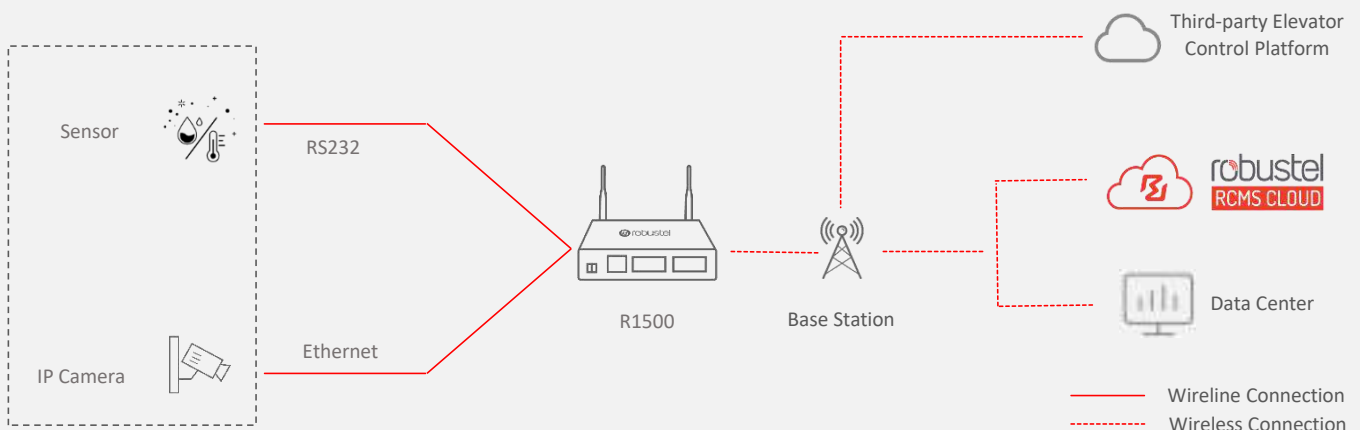
You can try Robustel's free router management platform by signing up here: <https://rcms-cloud.robustel.net>



KEY FEATURES

- RobustOS + SDK + App
- IPsec/OpenVPN/GRE/L2TP/PPTP/DMVPN and various VPNs
- Supporting double cards link backup and ICMP detection
- Supporting SMS, Email, SNMP Trap and RobustLink
- event alarms
- Supporting Modbus RTU to TCP、Modbus Master
- Supporting TCP client/server, UDP and virtual serial ports
- Supporting IP Passthrough
- DHCP server
- Supporting RobustVPN cloud platform, providing easy and safe remote access for PLC and other industrial devices
- Supporting RobustLink M2M centralized management platform, real time monitoring device network status and counting device flow
- Supporting Web、CLI、USB、SMS and RobustLink to upgrade firmware
- Powerful industrial design (9~36V DC input voltage, supporting desktop placement, wall mount or rail mount)

APPLICATION EXAMPLE



SPECIFICATIONS

Cellular Interface

Number of antennas	2 (MAIN + AUX)
Connector	SMA-K
SIM	2 x Mini SIM (2FF)
Standard	GSM/WCDMA/FDD LTE/TDD LTE

Ethernet Interface

Number of ports	1 x 10/100 Mbps
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Serial Interface

Number of ports	2 x RS232
Connector	DB9
Signal	TxD, RxD, GND, CTS, RTS, DSR, DTR
Baud rate	300bps ~ 115200bps

Others

LED indicators	1 x RUN, 1 x MDM, 1 x USR, 3 x RSSI Network indicator (link + rate)
Built-in	RTC, Watchdog, Timer

Software (Basic features of RobustOS)

Network protocols	PPP, PPPoE, TCP, UDP, DHCP, ICMP, NAT, HTTP, HTTPS, DNS, ARP, NTP, SMTP, Telnet, SSH2, DDNS, etc.
VPN tunnel	IPsec, OpenVPN, GRE
Management	Web, CLI, SMS
Serial port	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway

App Center (Available Apps for RobustOS)

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

Supported programming language	C, C++
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Flash available for SDK	3 MB
RAM available for SDK	16 MB

Power Supply and Consumption

Connector	2-pin 3.5 mm
Input voltage	9 ~ 36V DC
Power consumption	Idle: 80 mA@12 V Data link: 450 mA (peak) @12 V

Physical Characteristics

Ingress protection	IP30
Housing & Weight	Plastic, 300 g
Dimensions	118 x 97.5 x 28.5 mm
Installations	Desktop, wall mounting and DIN rail mounting
Operating temperature	-40 ~ +75 °C
Storage temperature	-40 ~ +85 °C
Relative humidity	5 ~ 95% RH

Regulatory and Type Approvals

Environmental	RoHS2.0, WEEE
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ORDERING INFORMATION

Model	PN	Category	Frequency Bands*	Country/Region	Certifications (*In progress)
R1500-4L	B041701	Cat 4	4G: LTE FDD: B1/B3/B5/B7/B8/B20 LTE TDD: B38/B40/B41 3G: WCDMA: B1/B5/B8 2G: GSM: B3/B8	EMEA	CE
	B041703		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

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