R1500 robustOS

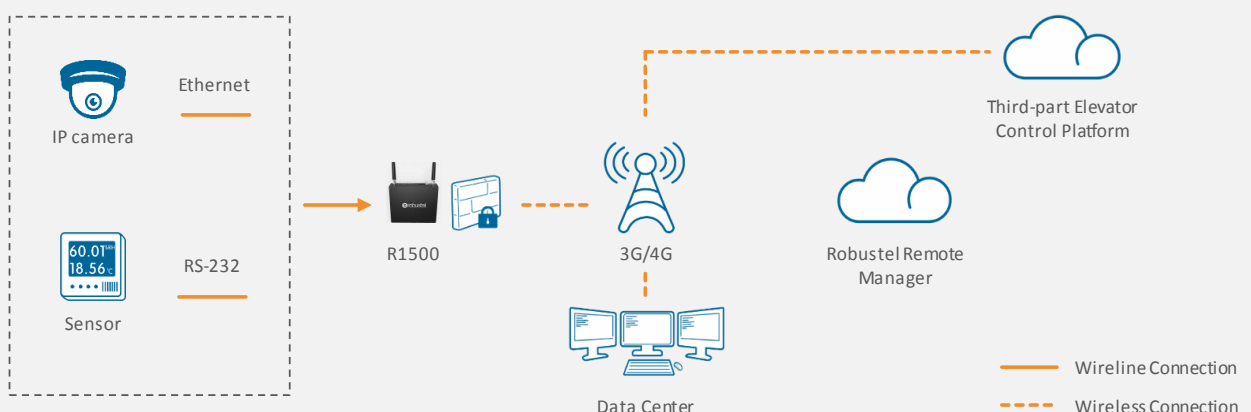## Industrial Cellular IoT Gateway
1 Eth + 2 RS-232

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, Python or Java. It also provides rich **Apps** to meet fragmented IoT market demands.

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 Pass-through

> 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 (3 V & 1.8 V)
Standard	GSM/WCDMA/FDD LTE/TDD LTE

Ethernet Interface

Number of ports	1 x 10/100 Mbps

Serial Interface

Number of ports	2 x RS-232
Connector	DB9
Signal	TxD, RxD, GND, CTS, RTS, DSR, DTR
Baud rate	300bps to 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

App Center (Available Apps for RobustOS)

Apps*	Language, RobustLink

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

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

Power Supply and Consumption

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

Physical Characteristics

Ingress protection	IP30
Housing & Wight	Plastic, 300 g
Dimensions	118 x 97.5 x 28.5 mm
Installations	Desktop, wall mounting and DIN rail mounting

Aprrovals

Regulatory	CE, Telec, RCM
Environmental	RoHS2.0, WEEE

ORDERING INFORMATION

Model	R1500-4L
Type	LTE Gateway
Air Interface	GSM/WCDMA/FDD LTE/TDD LTE

Frequency Bands	
4G*	EMEA: B1/B3/B5/B7/B8/B20/B28A; B38/B40/B41
	AU: B1/B2/B3/B4/B5/B7/B8/B28; B40
3G	EMEA: B1/B5/B8
	AU: B1/B2/B5/B8
2G	EMEA: B3/B8
	AU: B2/B3/B5/B8
Operating Temperature	-40 to +75 °C
Storage Temperature	-40 to +85 °C
Relative Humidity	5 to 95% RH

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