



# R3010 robustos

Industrial Cellular IoT Gateway

2xEth + 1xVoice + 1xRS-232 + 1xRS-485 +1xCAN + 1xConsole + 1xUSB



#### INTRODUCTION

Robustel R3010 is an industrial gateway designed for elevator monitoring and provides fast, reliable and stable Internet connectivity.

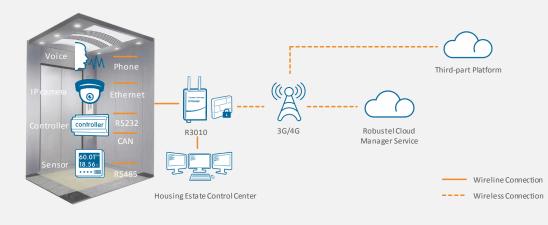
R3010 is a powerful gateway developed from **RobustOS**, a Robustel self-developed and Linux-based operating system which is designed to be used in Robustel hardware routers. The RobustOS includes basic networking features and protocols providing customers with a very good user experience. Meanwhile, 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.

#### **KEY FEATURES**

- Supports 2G/3G/4G cellular network
- Supports always online and connect according to needs
- Various interfaces: RS232/CAN/RS485/Console/USB/Ethernet/FXS
- RS485 serial port supports BACnet protocol
- Supports GSM and VolTE(optional) for voice traffic
- Supports IPSec, OpenVPN, PPTP, L2TP, GRE, DMVPN
- Supports Modbus RTU/ASCII converts to TCP
- > Built-in real time clock, software watchdog
- Supports message, telephone and reboot at regular time
- Supports e-mail and message event alert
- RobustOS + SDK + App
- Equipped with third party management platform, to realize real-time processing and analysis, fault real-time warning
- Management via SMS/Web/CLI/SNMP/RobustLink Cloud
- Robust industrial design (9 to 26V DC, desktop, wall or DIN rail mounting)

#### **APPLICATION EXAMPLES**





### **SPECIFICATIONS**

**Cellular Interface** 

Number of Antenna 2 (MAIN + AUX)
Type of Ports SMA male
SIM slot Number 1 (3.0 V/1.8 V)

Standards GSM/GPRS/EDGE/WCDMA/HSDPA/HS UPA/HSPA+/DC-HSPA+/TD-SCDMA/CD

MA (CDMA 1X/EVDO)/FDD LTE/TDD

LTE

**Device Management** 

Management Web, CLI, SNMP v1/v2/v3, SMS

RobustLink device management cloud

platform

RobustVPN VPN cloud platform

**LED Indicators** 

LED Indicators RUN, MODEM, USR, RSSI(1-3), PWR

Network port indicator

**Voice Interface** 

Physical Connector 3-pin 3.81mm connector

Interface type 1xFXS

Interface Standard ITU Q.512 (SLIC), ITU K.20

(overcurrent and overvoltage

protection)

Subscriber line interface circuit (SLIC)

Ring voltage 40~90 Vpk configurable

Ring frequency 20~25 Hz Ring waveform sinusoidal

Maximum ringer load 5 ringer equivalence numbers (RENs)

On-hook voltage (tip/ring) -46~-56V
Off-hook current 18~20 mA
Terminating impedance configurable

Other

Number of Ports 1x RS-232, 1 x CAN, 1 x RS-485 serial

port, 1 x Console, 1 x SIM port

RS-232 Tx, Rx, GND CAN H, L, GND

RS-485 A (Data+), B (Data-), GND

Console Tx, Rx, GND

Interface 3-pin 3.81mm connector

Type of Ports 2 x SMA female antenna port (MAIN +AUX)

Ethernet Port 2 x 10/100 Mbps (ETH0 + ETH1)
Expansion 1 x USB 2.0 host up to 480 Mbps

#### Software(Basic features of RobustOS)

Network protocols PPP、PPPoE、TCP、UDP、DHCP、ICMP、NAT、

HTTP、HTTPs、DNS、ARP、RIP、OSPF、NTP、SMTP、Telnet、VLAN、SSH2、IP Pass-through, etc.

VPN tunnel IPsec, OpenVPN, GRE

Firewall DMZ, anti-DoS, Filtering (IP/Domain name/MAC

address), Port Mapping, Access Control

Management Web, CLI, SMS

Serial port Transparent, TCP Client/Server, UDP,

Modbus RTU Gateway, BACnet

App center(Apps of RobustOS)

Apps L2TP、PPTP、DMVPN、RobustVPN、

DDNS、VRRP、QoS、Captive Portal、 WLAN Multi AP、SNMP、Language、

RobustLink

\*Request on demand, for more Apps please visit www.robustel.com.

#### **Power Supply and Consumption**

Power supply interface 2-pin 3.81mm connector

Input voltage 9 to 26 VDC

Power consumption 900 mA (MAX) @ 9 V, 600 mA (MAX) @ 12 V,

400 mA (MAX) @ 26 V

#### **Physical Characteristics**

Industry Protection Level IP30 Housing Metal, 300g

Dimensions 134mm x 98mm x 32mm

Installation Desktop, wall and DIN rail mounting

Operation Temperature -40~75°C
Storage Temperature -40~85°C
Humidity 5~95%RH

#### **Approvals**

Regulatory CE, FCC, IC, PTCRB

Carrier AT&T
Environmental RoHS, WEEE

#### ORDERING INFORMATION

Model	R3010-4L
Antenna Number	2
Air Interface	GSM/GPRS/EDGE/ HSDPA/HSUPA/HSPA+/FDD LTE
Frequency Bands	EU: B1/B2/B3/B4/B5/B7/B8/B20
4G*	US: B2/B4/B5/B13/B17
3G	HSDPA/HSUPA/HSPA+/: B1/B2/B5/B8
2G	GSM/GPRS/EDGE: 850/900/1800/1900 MHz
Storage Environment	-40 to 85°C
Operating Environment	-40 to 75°C
Relative Humidity	5 to 95% RH

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





# **Assured Systems**

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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