

# R2011 robustos

Industrial Cellular Router 5 Eth + 2 SIM



## INTRODUCTION

The Robustel R2011 Industrial Cellular Router is a rugged, versatile 4G router with 5 Ethernet ports, dual SIM single standby capability and a range of advanced functions for mission critical IoT or M2M applications.

The R2011 runs on Robustel's own Linux based Operating System, RobustOS. Developed entirely in-house, this gives way to a very high standard of technical support and high reliability. Robustel offers a **Software Development Kit** (SDK) to allow additional customization by using C, C++. It also provides rich **Apps** to meet fragmented IoT market demands such as:

## **RobustVPN**

 $\label{thm:lightly flexible hosted VPN service so customers can easily enjoy a "fixed IP router"$ 

#### **Data-Guard**

Invaluable failsafe in case of a system failure and runaway data usage

### **Smart Reboot**

SMS tool to push roaming SIMs from a non-working to working state  $\,$ 

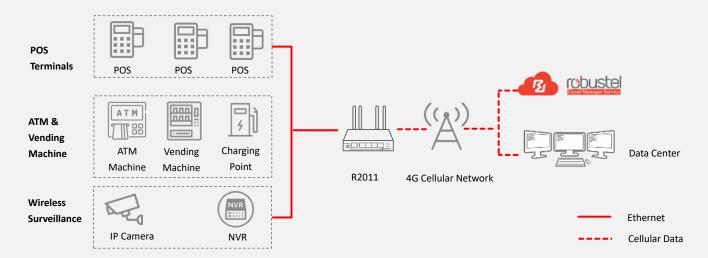
#### **Smart Roaming**

Provides you with device-assisted intelligent network selection for roaming SIMs to improve performance and reduce risk.

# **KEY FEATURES**

- Dual-SIM redundancy for continuous cellular network connections
- Link Manager supports Cellular WAN, Ethernet WAN, WLAN WAN link backup and ICMP detection
- WAN Static/DHCP Client
- RobustOS + SDK + Apps
- IPsec/OpenVPN/GRE/Wireguard VPN capabilities
- Management and maintenance via Web/RCMS Cloud
- Auto reboot via SMS/time schedule
- Robust industrial design (9 to 36 V DC, desktop or wall mounting or DIN rail mounting)

# **APPLICATION EXAMPLE**



## **SPECIFICATIONS**

**Cellular Interface** 

Number of antennas 2 (MAIN + AUX) or 1 (MAIN)

Connector SMA-K

SIM 2 Mini SIMs (2FF)

**Ethernet Interface** 

Number of ports  $5 \times 10/100$  Mbps,  $5 \times LAN$  or  $4 \times LAN + 1 \times WAN$ 

WAN port Supports 802.3at PD feature (optional)

Magnet isolation protection 1.5 KV

Wi-Fi Interface

Number of antennas 2 (Wi-Fi1 + Wi-Fi2)

Connector RP-SMA-K

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

Frequency bands 2.4 GHz

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

**Others** 

Reset button 1 x RST

LED indicators 1 x RUN, 1 x MDM, 1 x Wi-Fi, 3 x RSSI

Built-in Watchdog, Timer

**Software** (Basic features of RobustOS)

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

HTTPs, DNS, ARP, BGP, RIP, OSPF, NTP, SMTP,

Telnet, VLAN, SSH2, DDNS, etc

VPN tunnel IPsec, OpenVPN, GRE, WireGuard

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

MAC address), Port Mapping, Access Control

Remote management Web, CLI, SMS

Serial port Transparent, TCP Client/Server, UDP,

Modbus RTU Gateway

**SDK** 

Supported programming

language

C, C++

Flash available for SDK 16 MB RAM available for SDK 64 MB

App Center (Available Apps for RobustOS)

Apps\* L2TP, PPTP, DMVPN , VRRP, QoS, Captive Portal,

WLAN Multi AP, SNMP, Language, RCMS

\*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 ~ 36 V DC
Power consumption Idle: 200 mA@12 V

Data link: 580mA (peak)@12 V

**Physical Characteristics** 

Ingress protection IP30

Housing & Weight Metal, 350g
Dimensions 127 x 82 x 30 mm

Installations Desktop, wall mounting and 35 mm DIN rail

mounting

Operating temperature  $-35 \sim +75 ^{\circ}\text{C}$ Storage temperature  $-40 \sim +85 ^{\circ}\text{C}$ Relative humidity  $5\% \sim 95\%$ 

Regulatory and Type Approvals (\*In progress)

Environmental ROHS 2.0\*

EMI EN 55032 Conducted Emission class B

EN 55032 Radiated Emission class B

EMS IEC 61000-4-2 (ESD) Level 4

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 IEC 61000-4-11 (DIP)

## ORDERING INFORMATION

Model	PN	LTE Category	Frequency Bands*	Country/ Region	Certification (*In progress)
R2011-A-4L-A15CN	B070703	Cat 4	<b>4G</b> : LTE FDD: B1/B3/B5/B8 LTE TDD: B34/B38/B39/B40/B41 <b>3G</b> : WCDMA: B1/B5/B8 <b>2G</b> : GSM: B3/B8	China, India	CCC*
R2011-A-4L-A16EU	B070704	Cat 4	<b>4G</b> : LTE FDD: B1/B3/B7/B8/B20/B28 LTE TDD: B38/B40/B41 <b>3G</b> : WCDMA: B1/B8 <b>2G</b> : GSM: B3/B8	Europe	CE*
R2011-A-4L-A03AU	B070702	Cat 4	<b>4G</b> : LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 LTE TDD: B40 <b>3G</b> : WCDMA: B1/B2/B5/B8 <b>2G</b> : GSM: B2/B3/B5/B8	South America, Australia, New Zealand	RCM*

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

