



eSIM robustOS

# R2011e

Industrial Cellular Router  
5 x ETH + 1 x eSIM + 1 x SIM



## INTRODUCTION

The Robustel R2011e is an industrial 4G/LTE router designed for dependable site connectivity with modern eSIM flexibility. Built on the proven R2011 platform, the R2011e replaces the secondary physical SIM slot with an embedded MFF2 eSIM with GSMA SGP.22 compliant, enabling a hybrid SIM architecture (1 x SIM + 1 x eSIM) that simplifies international deployment, subscription management, and long-term device lifecycle operations.

**Robustel Cloud Manager Service (RCMS)** is a cloud-based platform for real-time monitoring and centralized management of Robustel routers and gateways. With Zero-Touch eSIM Provisioning, RCMS allows enterprises to remotely assign and activate eSIM profiles at scale - overcoming the industry limitation where SGP.22 cannot support mass deployment on its own. This capability eliminates manual SIM handling, reduces on-site labour, and accelerates global rollouts.

Unlike traditional dual-SIM routers, the R2011e introduces a set of advanced eSIM capabilities designed to accelerate global IoT rollout and reduce operational friction:

- **Robust and Secure eSIM Profile Management:** supports remote enable/disable and profile switching, allowing operators and enterprises to optimise connectivity and reduce reliance on physical SIM logistics.
- **Auto Failsafe Recovery:** When profile download or activation fails, the device automatically rolls back to the previous working profile, ensuring continuous connectivity and preventing remote provisioning failures.
- **Enhanced lifecycle management:** eSIM profile rotation reduces dependence on long-term roaming agreements and mitigates SIM-card-swap maintenance tasks.

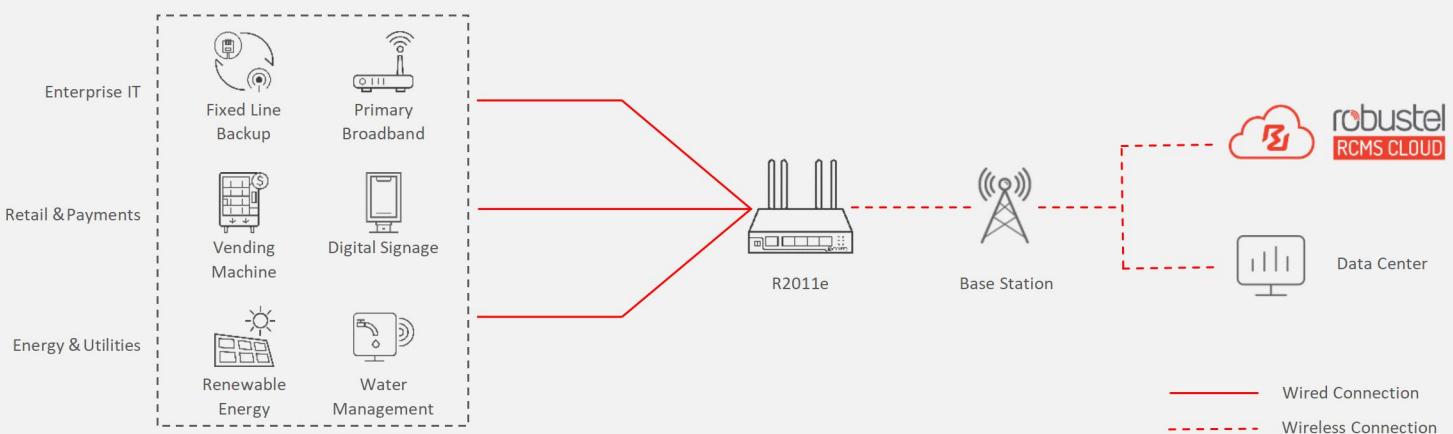
## KEY FEATURES

- GSMA SGP.22 compliant for multi-scenarios IoT provisioning
- MFF2 eSIM supported for zero-touch deployment
- Network redundancy with SIM + eSIM dual backup
- Link Manager supports backup for Cellular, Ethernet, and WLAN along with ICMP detection
- WAN configuration options include Static and DHCP Client
- Features RobustOS, an SDK, and a variety of applications
- Supports VPN capabilities including IPsec, OpenVPN, GRE, and WireGuard
- Management and maintenance via Web/RCMS
- Auto-reboot functionality is available through SMS or on a time schedule
- Robust industrial design supports 9 to 36 V DC, with options for desktop, wall, or DIN rail mounting



robustel  
RCMS CLOUD

## APPLICATION EXAMPLE



# SPECIFICATIONS

<b>Hardware System</b>		<b>Software (Basic features of RobustOS)</b>		
CPU	MIPS, 650 MHz	Network protocols	PPPoE, TCP, UDP, DHCP, NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.	
RAM	128 MB	VPN tunnels	IPsec, OpenVPN, GRE, Wireguard	
Flash	32 MB	Firewalls	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control	
<b>Cellular Interface</b>			<b>SDK</b>	
Number of antennas	2 (MAIN + AUX)	Supported programming languages	C, C++	
Connector	SMA-K	Flash available for SDK	16 MB	
SIM	1 x Mini SIM (2FF) + 1 x eSIM (MFF2) SGP.22 eSIM, profile download and removal operations Typically supports up to 6 eSIM profiles	RAM available for SDK	64 MB	
<b>Ethernet Port</b>			<b>App Center (Available Apps for RobustOS)</b>	
Number of ports	5 x 10/100 Mbps 5 x LAN or 4 x LAN + 1 x WAN	Apps*	L2TP, PPTP, DMVPN, VRRP, QoS, Captive Portal, WLAN Multi AP, SNMP, Language, RCMS, Edge2Cloud	
Magnet isolation protection	1.5 KV	<i>*Request on demand. For more Apps please visit <a href="http://www.robustel.com">www.robustel.com</a>.</i>		
<b>Wi-Fi Interface</b>			<b>Cloud Platform</b>	
Number of antennas	2 (Wi-Fi 1 + Wi-Fi 2)	Robustel Cloud Manager	RobustLink, RobustVPN, Operation Console	
Connector	RP-SMA-K	Service (RCMS)		
Standards	802.11 b/g/n Supporting AP and Client modes	<b>Regulatory and Type Approvals</b>		
Frequency bands	2.4 GHz	Environmental	RoHS2.0	
Security	WEP, WPA, WPA2, WPA3	EMI	EN 55032 Conducted Emission Class B EN 55032 Radiated Emission Class B	
Encryption	AES, TKIP	EMS	EN 61000-4-2 (ESD) Level 4 EN 61000-4-3 (RS) Level 2 EN 61000-4-4 (EFT) Level 2 EN 61000-4-5 (Surge) Level 3 (AC Port) EN 61000-4-6 (CS) Level 2 EN 61000-4-11 (Dips)	
<b>Others</b>				
Reset button	1 x RST			
LED indicators	3 x RSSI, 1 x RUN, 1 x MDM, 1 x Wi-Fi			
Watchdog	Built-in			
<b>Power Supply and Consumption</b>				
Connector	2-pin 3.5 mm female socket			
Input voltage	12/24 V DC, 9 ~ 36 V DC Reverse polarity protection, surge protection			
Power consumption	Idle: 1.0 W@12 V Max: 8.0 W@12 V			
Recommended power	12 V DC/1.5 A power adapter			
<b>Physical</b>				
Ingress protection	IP30			
Housing & Weight	Metal, 350 g			
Dimensions	30 x 82 x 127 mm			
Installations	Desktop, wall mounting and 35 mm DIN rail mounting			
Operating temperature	-35 ~ +75 °C			
Storage temperature	-40 ~ +85 °C			
Relative humidity	5 ~ 95% RH (non-condensing)			

## ORDERING INFORMATION

Model	Order Code	eSIM	Frequency Bands*	Country /Region	Certification	Package Contains
R2011e-A-4L-A24EU	A007000725	✓	<b>LTE CAT4</b> 4G: LTE FDD: B1/3/5/7/8/20/28 LTE TDD: B38/40/41 3G: WCDMA: B1/5/8 2G: GSM: B3/8	EMEA+SEA	CE UKCA	1 x R2011e Router (B Code: B007000717)
	A007000726	✓				1 x R2011e Router (B Code: B007000717) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 2 x Wi-Fi Antenna 1 x Power Adapter

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