



# R1510e

Industrial Cellular VPN Router

2 x Ethernet + 1 x eSIM + 1 x DI + 1 x DO



## INTRODUCTION

The Robustel R1510e is a compact industrial LTE router designed to connect both Ethernet and serial equipment using fully embedded eSIM- with no physical SIM slots to manage. Built on the proven R1510 platform, the R1510e replaces the physical SIM slot with an embedded MFF2 eSIM with GSMA SGP.22 compliant, enabling 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 physical SIM routers, the R1510e introduces a set of advanced eSIM capabilities designed to accelerate global IoT rollout and reduce operational friction:

- **Global Frequency Band Support:** ensuring consistent performance across major regions and simplifying cross-border for OEMs and system integrators.

- **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.

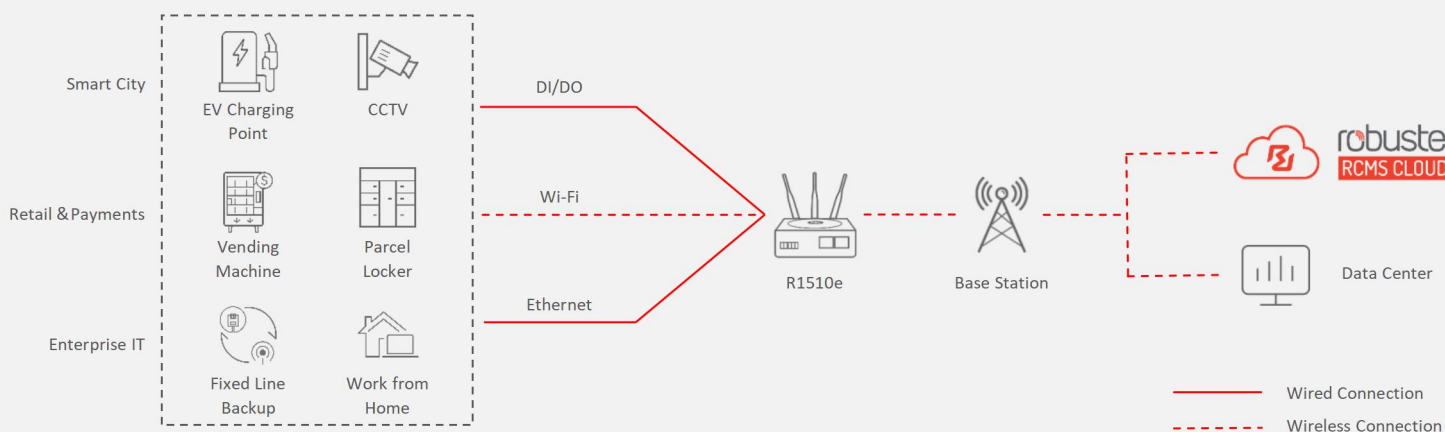
- **Enhanced lifecycle management:** eSIM profile rotation reduces dependence on long-term roaming agreements and mitigates SIM-card-swap maintenance tasks.

## KEY FEATURES

- MFF2 eSIM supported for zero-touch deployment
- GSMA SGP.22 compliant for global IoT provisioning
- Highly stable 2G/3G/4G cellular connections
- Ethernet, Wi-Fi, and 4G internet connection options with auto-failover capability
- Free cloud management platform - RCMS
- RobustVPN feature provides a fixed IP address on any eSIM
- Compact design ideal for space-constrained applications
- Wall-mount and DIN-rail mounting options available



## APPLICATION EXAMPLE



# SPECIFICATIONS

## Hardware System

CPU	MIPS, 650 MHz
RAM	128 MB
Flash	16 MB

## Cellular Interface

Number of antennas	2 (MAIN + AUX)
Connector	SMA-K
SIM	1 x eSIM (MFF2) SGP.22 eSIM, profile download and removal operations Typically supports up to 8 eSIM profiles

## Ethernet Port

Number of ports	2 x 10/100 Mbps 2 x LAN or 1 x LAN + 1 x WAN
Magnet isolation protection	1.5 KV

## Digital Input/Output Port

Number of ports	1 x DI (wet contact) + 1 x DO (wet contact)
Connector	3-pin 3.5 mm female socket
Absolute maximum VDC	30 V DC (DI/DO)
Absolute maximum ADC	20 mA

## Wi-Fi Interface

Number of antennas	2 (1 x external antenna + 1 x PCB antenna)
Connector	RP-SMA-K (external antenna)
Standards	802.11 b/g/n, supporting AP and Client modes
Frequency bands	2.4 GHz
Security	WEP, WPA, WPA2, WPA3
Encryption	AES, TKIP

## Others

Reset button	1 x RST
LED indicators	1 x RUN, 1 x MDM, 1 x USR, 1 x RSSI, 1 x WLAN
Watchdog	Built-in

## Power Supply and Consumption

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: 1.5 W@12 V Max: 6.0 W@12 V
Recommended power supply	12 V DC/1.0 A power adapter

## Physical Characteristics

Ingress protection	IP30
UL 94	V-0, 5 VB
Housing & Weight	Plastic, 150 g
Dimensions	31.5 x 91.5 x 91.5 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting
Operating temperature	-25 ~ +70 °C
Storage temperature	-40 ~ +85 °C
Relative humidity	5 ~ 95% RH (non-condensing)

## Software (Basic features of RobustOS)

Network protocols	PPPoE, TCP, UDP, DHCP, NAT, DNS, NTP, SMTP, Telnet, VLAN, SSH2, DDNS, etc.
VPN tunnels	IPsec, OpenVPN, GRE, WireGuard
Firewalls	DMZ, anti-DoS, Filtering (IP/Domain name/MAC address), Port Mapping, Access Control
Remote management	Web, CLI, SMS
Routing	Static routing, Dynamic routing (BGP, OSPF v2, RIP v1/v2)

## SDK

Supported programming languages	C, C++
Flash available for SDK	4 MB
RAM available for SDK	64 MB

## App Center (Available Apps for RobustOS)

Apps*	L2TP, PPTP, DMVPN, VRRP, Captive Portal, WLAN Multi AP, SNMP, Language, RCMS, etc.
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\*Request on demand. For more Apps please visit [www.robustel.com](http://www.robustel.com).

## Cloud Platform

Robustel Cloud Manager Service (RCMS)	RobustLink, RobustVPN, Operation Console
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## Regulatory and Type Approvals

Environmental	RoHS2.0, WEEE
EMI	EN 55032 Conducted Emission Class B EN 55032 Radiated Emission Class B
EMS	EN 61000-4-2 (ESD) Contact Level 2, Air Level 3 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

## ORDERING INFORMATION

Model	Order Code	eSIM	Frequency Bands*	Country /Region	Certification	Package Contains
R1510e-4L	A004800726	√	<b>LTE CAT4</b> 4G: LTE FDD: B1/2/3/4/5/7/8/12/13/18/19/ 20/25/26/28/66 LTE TDD: B38/39/40/41	Global	CE UKCA RCM FCC IC	1 x R1510e Router (B Code: B004800720)
	A004800727	√	3G: WCDMA: B1/2/4/5/6/8/19  2G: GSM: B2/3/5/8			1 x R1510e Router (B Code: B004800720) 1 x DIN Rail Mounting Kit 2 x Cellular Antenna 1 x Wi-Fi Antenna 1 x Power Adapter

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