

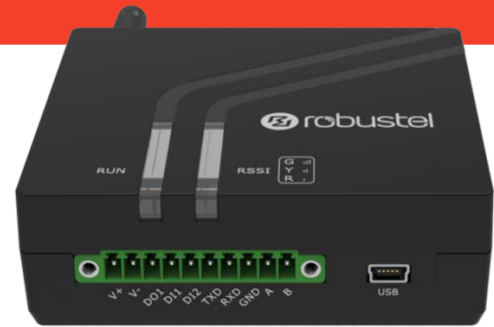


robustOS

M1200

Smart Industrial IoT Gateway

2 x SIM + 2 x DI + 1 x DO + 1 x RS-232 + 1 x RS-485 +
1 x Mini USB



INTRODUCTION

The Robustel Smart Industrial IoT Gateway M1200 is a compact cellular gateway compatible with GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE/Cat M1/Cat NB1 networks. This dual-SIM gateway enables remote data transmission from local serial ports and I/O, supporting interfaces such as RS-232, RS-485, and mini-USB. The M1200 provides users with stable network connectivity and reliable data transmission, designed to meet the demands of industrial applications with its standards-compliant design. As a versatile gateway, it is applicable in various scenarios, including energy, transportation, agriculture, and more.

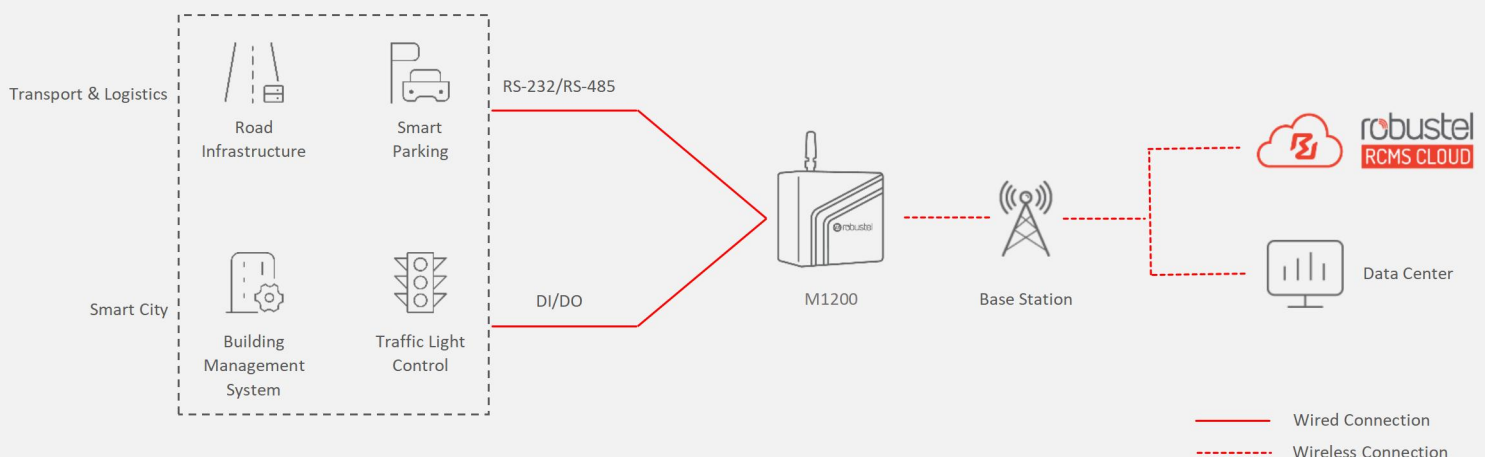
The **Robustel Cloud Manager Service (RCMS)** is a unified cloud-based platform designed for real-time monitoring and centralized management of industrial IoT devices. Fully compatible with Robustel routers and gateways, RCMS delivers an interactive geospatial dashboard that enables users to visualize device locations and track critical metrics such as data usage, signal strength, and network status. To ensure seamless operations, the platform facilitates over-the-air (OTA) updates for firmware, configurations, and applications, minimizing downtime while optimizing system performance. Experience robust, cloud-native device management by registering at: <https://rcms-cloud.robustel.net>



KEY FEATURES

- Automatic connections for GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE/Cat M1/Cat NB1 (no AT commands required)
- Dual-SIM backup options (push-push or MFF type)
- Supports IPsec, OpenVPN, GRE, L2TP, and PPTP protocols
- Transparent TCP and UDP protocol connections
- Features include ICMP, DDNS, SNTP, and Telnet support
- Modbus RTU to TCP conversion
- Auto-reboot functionality via SMS and timer
- Configuration and firmware upgrades via USB and RCMS
- SMS notifications when Digital Input (DI) is triggered
- Robust industrial design with a voltage range of 9 ~ 36 V DC, extended operating temperature from -40 ~ +75 °C, and options for desktop, wall, or DIN rail mounting
- Support for bridge (modem-only) mode via serial or USB port

APPLICATION EXAMPLE



SPECIFICATIONS

Hardware System

CPU	ARM, 300 MHz
RAM	64 MB
Flash	16 MB

Cellular Interface

Number of antennas	1
Connector	SMA-K
SIM	2 x Mini SIM (2FF)
Standards	GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/ HSPA+/FDD LTE/TDD LTE/Cat M1/Cat NB1

Serial Port

Number of ports	1 x RS-232 + 1 x RS-485
Connector	10-pin 3.5 mm RP female socket with lock
Baud rate	300 bps ~ 115200 bps
Signal definition	RS-232: TxD, RxD, GND RS-485: A (Data+), B (Data-)

Digital Input/Output Port

Number of ports	2 x DI (wet contact) + 1 x DO (wet contact)
Connector	10-pin 3.5 mm RP female socket with lock
ESD withstand level	Contact: ±6 K; Air: ±8 K
Absolute maximum VDC	“V+” DC (DI), 30 V DC (DO)

USB Port

Number of ports	1 x Mini USB for configuration
Connector	Mini female
Speed	2.0 high speed, up to 480 Mbit/s

Others

Reset button	1 x RST
LED indicators	1 x RUN, 1 x RSSI (red/green bi-color light)
Built-in	RTC, Watchdog, Timer

Power Supply and Consumption

Connector	10-pin 3.5 mm RP female socket with lock
Input voltage	12/24 V DC, 9 ~ 36 V DC Reverse polarity protection, surge protection
Power consumption	Idle: 1 W@12 V Max: 4 W@12 V
Recommended power supply	12 V DC/1.0 A power adapter

Software (Basic features of RobustOS)

Network protocols	PPP, TCP, UDP, ICMP, HTTP, HTTPS, DNS, NTP, SMTP, Telnet, SSH2, DDNS, etc.
VPN tunnels	IPsec, OpenVPN, GRE
Remote management	Web, CLI, SMS
Serial port protocols	Transparent, TCP Client/Server, UDP, Modbus RTU Gateway

SDK

Supported programming languages	C, C++
Flash available for SDK	3 MB
RAM available for SDK	16 MB

App Center (Available Apps for RobustOS)

Apps*	Language, RCMS, etc.
-------	----------------------

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

Cloud Platform

Robustel Cloud Manager Service (RCMS)	RobustLink, RobustVPN, Operation Console
---------------------------------------	--

Physical Characteristics

Ingress protection	IP30
Housing & Weight	Plastic, 106 g
Dimensions	28.5 x 75 x 85 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting
Operating temperature	-40 ~ +70 °C
Storage temperature	-40 ~ +85 °C
Relative humidity	0 ~ 95% RH (non-condensing)

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 EN 61000-4-6 (CS) Level 2

ORDERING INFORMATION

Model	Order Code	Frequency Bands*	Country /Region	Certification	Package Contains
M1200-4L	A003300703	4G: LTE FDD: B1/3/5/7/8/20 LTE TDD: B38/40/41 3G: WCDMA: B1/5/8 2G: GSM: B3/8	EMEA+SEA	ICASA, CE, UKCA	1 x M1200 Gateway (B Code: B033702)
	A003300704	4G: LTE FDD: B1/2/3/4/5/7/8/28 LTE TDD: B40 3G: WCDMA: B1/2/5/8 2G: GSM: B2/3/5/8	ANZ+LATAM	CRC, SUBTEL, RCM, FCC, MTC, ENACOM, URSEC, ARCOTEL	1 x M1200 Gateway (B Code: B033701)

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