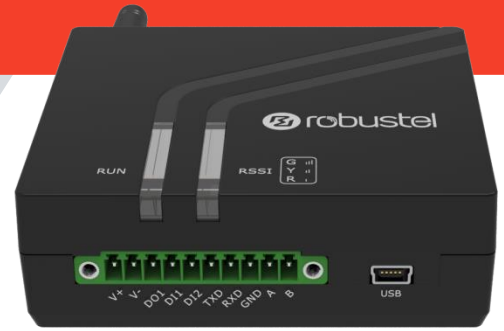




# M1200 robustOS

Smart Industrial IoT Gateway

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



## INTRODUCTION

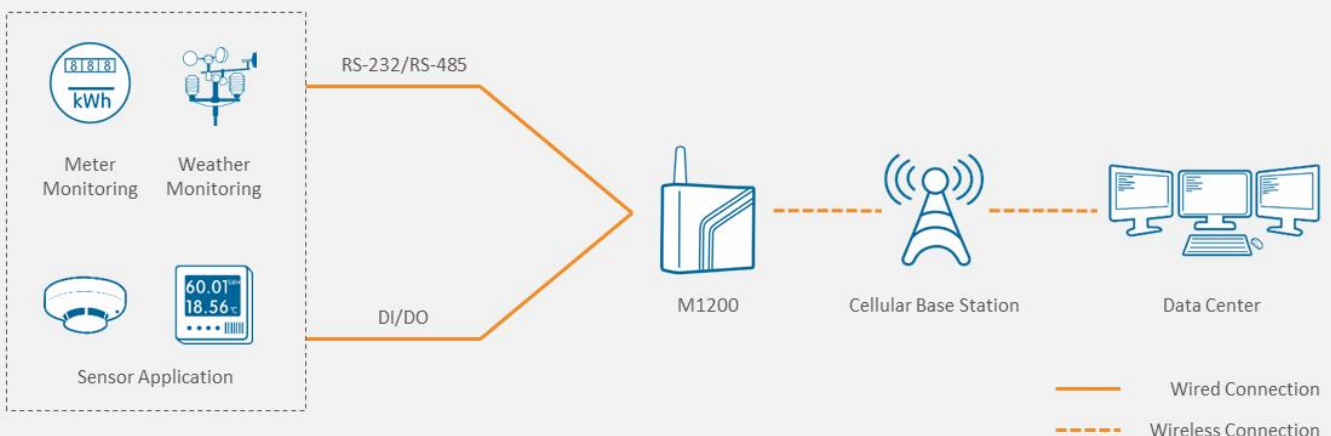
The Robustel Smart Industrial IoT Gateway M1200 is a compact cellular gateway based on GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE connections (No AT command required). This dual-SIM gateway enables remote data transmission of local serial ports and I/O, and supports such interfaces as RS-232, RS-485 and mini-USB. M1200 provides users with stable network connectivity and data transmission. It is available to meet industrial application demands for its standards-compliant industrial designs. As a universal gateway, it can be applied in many scenarios such as Energy, Transportation and Agriculture, etc.

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, Japan and Hong Kong.

## KEY FEATURES

- Auto GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE connections (No AT command required)
- Dual-SIM backup (push-push or MFF type optional)
- IPsec/OpenVPN/GRE/L2TP/PPTP
- Transparent TCP and UDP protocol connections
- ICMP, DDNS, SNTP and Telnet
- Modbus RTU to TCP
- Auto rebooting via SMS and Timer
- Configuration and firmware upgrading via USB and RobustLink
- Sending SMS if DI is triggered (optional)
- Robust industrial design (9 to 36V DC, -40 to +75 °C extended operating temperature, desktop or wall mounting or DIN rail mounting)

## APPLICATION EXAMPLE



## SPECIFICATIONS

### Cellular Interface

|                    |  |
|--------------------|--|
| Number of antennas | 1  |
| Connector          | SMA female   |
| SIM slot           | 2 (3.0 V & 1.8 V)  |
| Standards          | GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE |

### Serial Interface

|                 |  |
|-----------------|--|
| 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 to 115200 bps                    |
| RS-232          | TxD, RxD, GND                            |
| RS-485          | A (Data+), B (Data-)                     |

### Digital Input / Digital Output

|                      |   |
|----------------------|---|
| 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+" +5V DC (DI), 30V 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

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

### Software (Basic features of RobustOS)

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

### App Center (Available Apps for RobustOS)

|       |                      |
|-------|----------------------|
| Apps* | Language, RobustLink |
|-------|----------------------|

\*Request on demand. For more Apps please visit [www.robustel.com](http://www.robustel.com).

### Power Supply and Consumption

|           |  |
|-----------|--|
| Connector | 10-pin 3.5 mm RP female socket with lock |
|-----------|--|

|                   |  |
|-------------------|--|
| Input voltage     | 9 to 36V DC  |
| Power consumption | Idle: 50 to 70 mA@12 V<br>Data link: 300 mA (peak) @12 V |

### Physical Characteristics

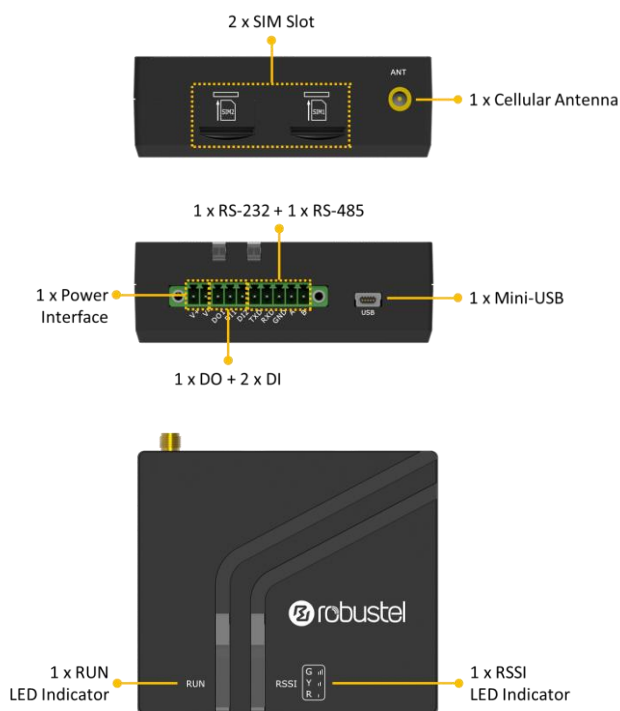
|                    |  |
|--------------------|--|
| Ingress protection | IP30   |
| Housing & Weight   | Plastic, 106 g                                     |
| Dimensions         | 85 x 75 x 28.5 mm                                  |
| Installations      | Desktop, wall mounting and 35 mm DIN rail mounting |

### EMC

|     |  |
|-----|--|
| EMI | EN 55032: 2015 (CE) Class B<br>EN 55032: 2015 (RE) Class B   |
| EMS | IEC 61000-4-2 2009 (ESD) Contact Level 3;<br>Air Level 3<br>IEC 61000-4-4 2012 (EFT) Level 2<br>IEC 61000-4-5 2014 (Surge) Level 2 |

### Certifications

WEEE, RoHS, CE



## ORDERING INFORMATION

| Model                 | M1200-3P                                   | M1200-4L  |
|-----------------------|--|---|
| Antenna Number        | 1  | 1   |
| Air Interface         | GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+ | GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE                                  |
| Frequency Bands*      | --   | FDD LTE: B1/B2/B3/B4/B5/B7/B8/B13/B20/B28<br>TDD LTE: B38/B40/B41<br>3GPP E-UTRA Release 11 |
| 4G                    |  |   |
| 3G                    | B1/B2/B5/B8/B19                            | B1/B2/B5/B8   |
| 2G                    | 850/900/1800/1900 MHz                      | 850/900/1800/1900 MHz   |
| Operating Environment | -40 to +75 °C / 0 to 95% RH                | -40 to +75 °C / 0 to 95% RH   |

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