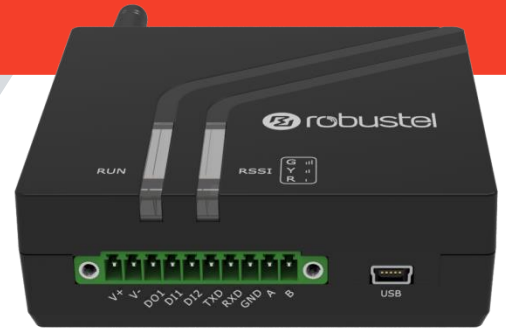




M1200 **robustOS**

Industrial Cellular Data Transfer Unit

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



INTRODUCTION

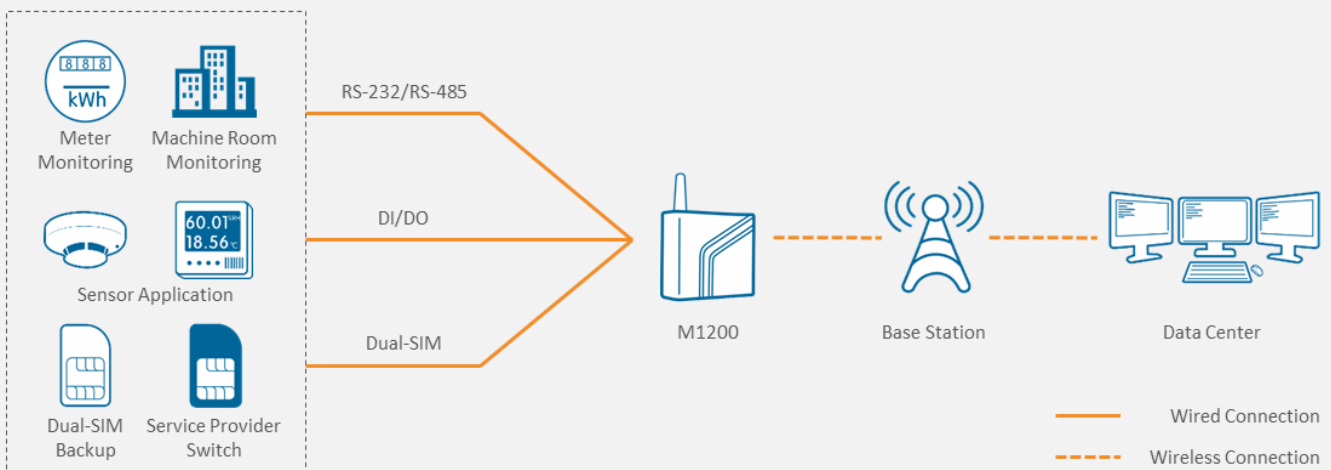
The Robustel Industrial Cellular Data Transfer Unit (DTU) M1200 is a compact cellular DTU based on GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA/HSUPA/HSPA+/FDD LTE/TDD LTE connections (No AT command required). This dual-SIM DTU enables remote data transmission of local serial ports and I/O, and supports such interfaces 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 DTU, 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)
- > Supporting two dial-up policies, *Always Online* and *Connect on Demand*
- > Dual-SIM backup (push-push or MFF type optional)
- > Supporting *SMS Direct* mode which can transparently convert serial data to SMS or vice versa
- > 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: ±4 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 and power supply
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.

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.

Power Supply and Consumption

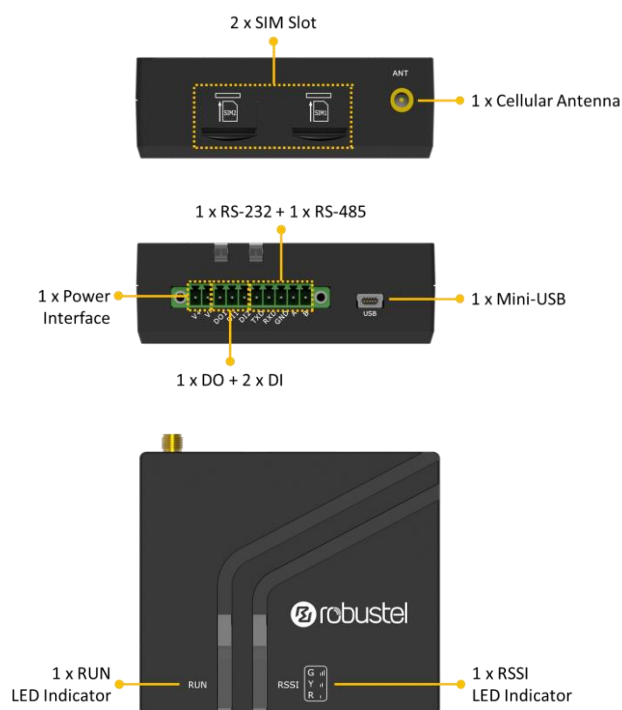
Connector	10-pin 3.5 mm RP female socket with lock
Input voltage	9 to 36V DC
Power consumption	Idle: 50 to 70 mA@12 V Data link: 200 mA (peak) @12 V

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 EN 55032: 2015 (RE) Class A
EMS	IEC 61000-4-2 2009 (ESD) Contact Level 3; Air Level 3 IEC 61000-4-4 2012 (EFT) Level 2 IEC 61000-4-5 2014 (Surge) Level 2



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 TDD LTE: B38/B40/B41 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.