# **Robustel** GoRugged M1000 Lite

Industrial GPRS Modem for GSM/GPRS Networks



### **Overview**

- The Robustel GoRugged M1000 Lite is a rugged cellular modem offering state-of-the-art GSM/GPRS connectivity for machine to machine (M2M) applications.
- The modem transmits data and short messages (SMS) over GSM/GPRS mobile networks, also is controlled by firmware through a set of AT commands.
- Has RS232 or RS485 interface, with 15 KV ESD serial line protections.
- The modem supports a wide range of input voltages from 9 to 36 VDC and a wide range of temperature from -25 to 70°C.
- The metal enclosure can be mounted on a DIN-rail or on the wall, also with extra ground screw.



## Features

- Control via AT commands (Hayes 3GPP TS 27.007 and 27.005)
- PPP, TCP/IP stack for GPRS data transfer
- CSD Data Transmission Rate up to 14.4 kbps
- Send / receive SMS via AT commands (Under normal mode)
  - Text and PDU SMS
  - Point to point SMS (MT/MO)
- Auto Reboot every 24 hours

## **Specifications**

Cellular Interface	Standard	GSM and GPRS	
		GPRS: max. 86 kbps (DL and UL)	
	Band Options	Quad-Band 850/900/1800/1900 MHz	
	GPRS Multi-slot Class	Class 12	
	Mobile Station Class	Class B	
	РВССН	Support	
	GPRS Coding Schemes	CS1 to CS4	
	CSD Data Transmission Rate	Up to 14.4 kbps	
	USSD	Support	
	Output Power	1 watt GSM1800/1900, 2 watts EGSM 900/GSM 850	
SIM Interface	Number of SIMs	1	
	SIM Card Reader	3V, 1.8V	
Antenna Interface	Antenna Interface	SMA Female, 50 ohms impedance	
-	Number of Ports	1	
	Interface	DB9 Female	
Serial Interface	Serial Standards	RS232 or RS485	
	ESD Protection	15KV	
	Data Bits	8	
	Stop Bits	1	
Serial	Parity	None	
Communication	Flow Control	RTS/CTS hardware flow control	
Parameters		XON/XOFF software flow control	
	Baudrate	Baud rates from 300bps to 115200bps	
		Auto-bauding from 1200 to 115200bps	
Serial Signals	RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND	
	RS-485	Data+ (A), Data- (B), GND	
LED Indicators	LED Indicators	2 LED indicators, PWR, NET	
Watchdog	Watchdog and Timer	Built-in watchdog and timer	
Power Supply	Power Supply Interface	2-pin 5mm pluggable terminal blocks	
Interface			
Power Requirements	Input Voltage	9 to 36 VDC	

> www.robustel.com 🕥 info@robustel.com

	Power Consumption	ldle: 50-60 mA @ 12 V
		Data Link: 100 to 200 mA (peak) @ 12 V
Physical Characteristics	Housing	Metal
	Weight	300g
	Dimension	Without ears (L x W x H): 102.4 x 71.4 x 29.4 mm
		With ears (L x W x H): 102.4 x 99.4 x 29.4 mm
	Installation Method	35mm Din-Rail or wall mounting or desktop
Environmental Limits	Operating Temperature	-25 to 70°C
	Storage Temperature	-40 to 85°C
	Operating Humidity	5 to 95% RH
Regulatory and Type	Directives	RoHS and WEEE compliant
Approvals	CE and R&TTE Approval	To be determined
Warranty	Warranty Period	1 year

#### **Packing List**

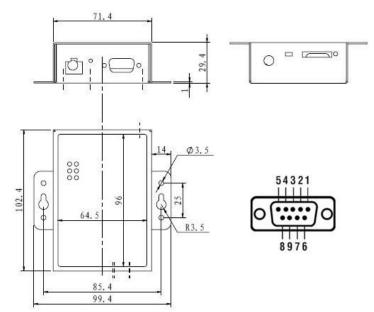
- Robustel M1000 Lite modem x1
- SMA antenna (Stubby antenna or Magnet antenna optional) x1
- 2-pin 5mm pluggable terminal block for power connector x1
- CD with user guide x1

**Optional Accessories** (can be purchased separately)

- AC/DC Power Supply Adapter (Input 100 to 240VAC, output 1A @ 12VDC) x1
- 35mm Din-Rail mounting kit x2
- Serial cable for RS232 (DB9 Female to DB9 Male, 1.5 meters) x1

Robustel GoRugged M1000 Lite Industrial GPRS Modem

## Dimensions



## **PIN Assignment**

**DB9** Female Connector

PIN	RS232	RS485 (2-wire)			
1	DCD	Data- (B)			
2	RXD	Data+ (A)			
3	TXD				
4	DTR				
5	GND	GND			
6	DSR				
7	RTS				
8	CTS				
9	RI				

# **Selection and Ordering Data**

Model No.	Built-in Module	Networks	RS232	RS485
M1000-LQM35A	Quectel M35	Quad-Band GSM 850/900/1800/1900 MHz, GPRS Class 10	ο	х
M1000-LQM35B	Quectel M35	Quad-Band GSM 850/900/1800/1900 MHz, GPRS Class 10	х	0



**Distributor Information** 

Guangzhou Robustel Technologies Co., LimitedCopyright© 2011 Robustel TechnologiesAll Rights Reserved.WEB:<a href="http://www.robustel.com">http://www.robustel.com</a>

E-MAIL: info@robustel.com