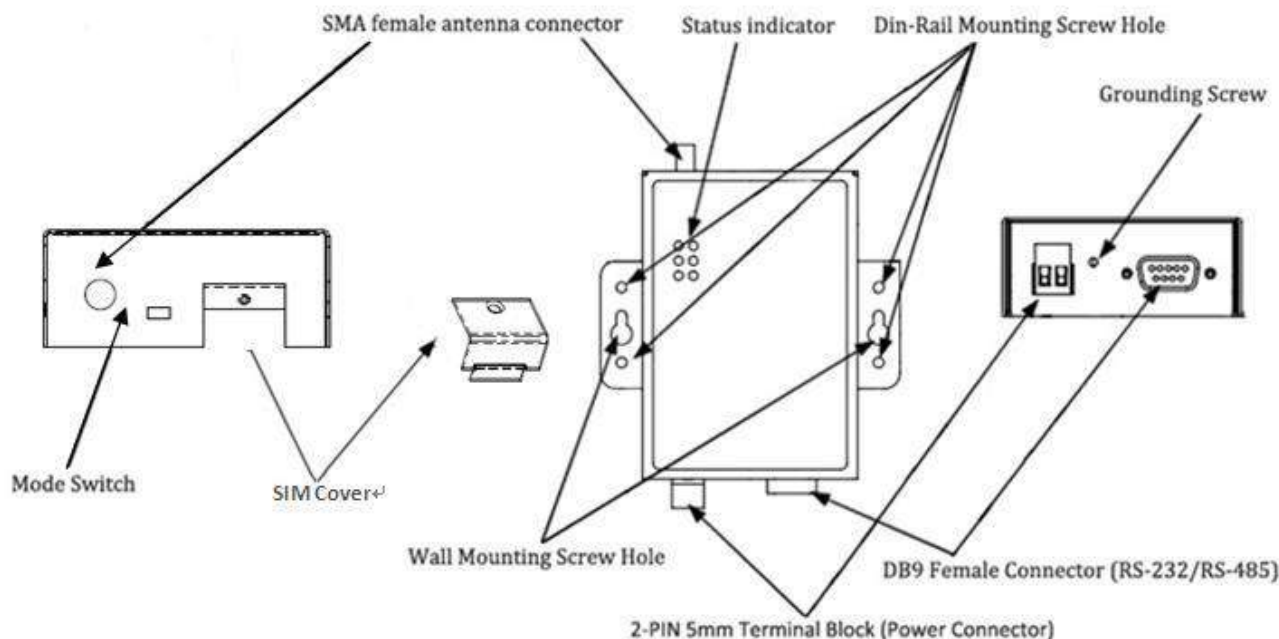


# Robustel GoRugged M1000 Quick Guide

## Chapter 1. Interface Introduction

### 1.1 Overview



### 1.2 LED Indicators

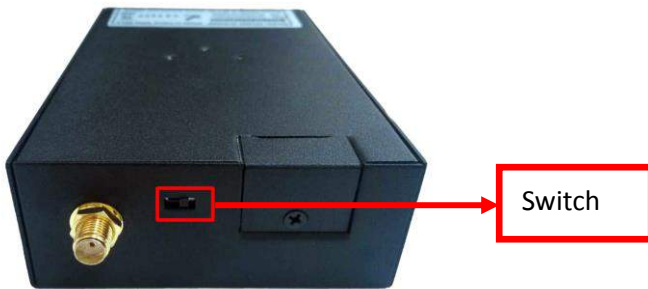


After inserting the SIM card into the modem and power on, the LED indicators' status should be as follow when work normally:

Name	Color	Status
RSSI (3 LEDs)	Green	At least two bars
NET	Red	Registered to network: 75 ms on / 3 s off
SYS	Green	Normal mode: blinking 1 time/2 seconds Config mode: blinking 2 times/second
PWR	Green	On when DC power connection

**Note:** Please refer to *Robustel GoRugged M1000 User Guide* to get more details about the LED indicators.

### 1.3 Working Mode Switch



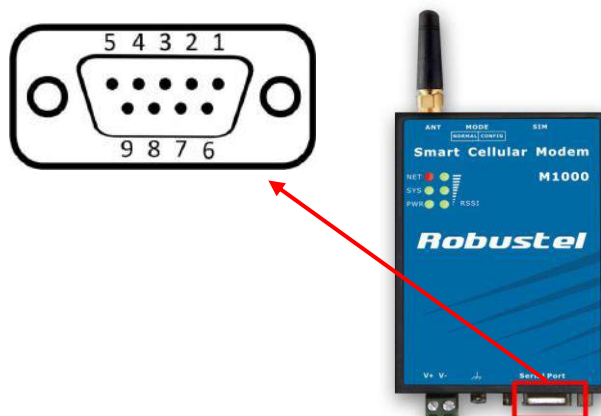
There are two working modes available in the modem, please read carefully before operate the Modem Configurator software:

Mode	Description
<b>Config Mode</b>	When DIP switches to <b>Config Mode</b> , user could use follow functions: <ol style="list-style-type: none"> <li>1. Configure modem via <b>Modem Configurator</b>;</li> <li>2. SMS Direct;</li> <li>3. Auto-reboot;</li> <li>4. Upgrade firmware.</li> </ol> <b>Serial port default parameters: 115200, 8, None, 1</b>
<b>Normal Mode</b>	When DIP switches to <b>Normal Mode</b> , user could use follow functions: <ol style="list-style-type: none"> <li>1. Control modem via AT commands;</li> <li>2. Send/receive SMS via AT commands;</li> <li>3. Auto-reboot.</li> </ol> <b>Serial port default parameters: Autobauding</b> <b>The autobauding mode allows the modem to automatically detect the transmission speed used by the DTE.</b>

### 1.4 PIN assignment

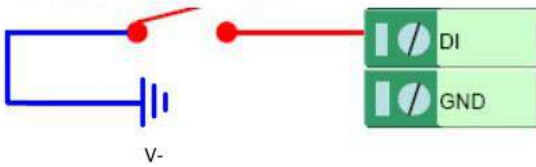
PIN assignment for modem’s DB9 female connector

PIN	RS232	RS485 (2-wire)	I/O
1		Data- (B)	
2	RXD ->	Data+ (A)	
3	TXD <-		
4			DO
5	GND	GND	
6			DI
7	RTS <-		
8	CTS ->		
9			IO GND

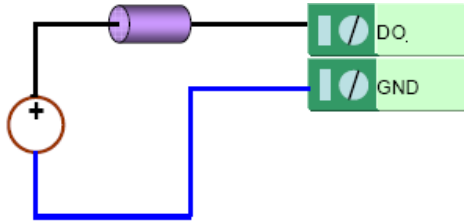


## 1.5 Connecting the I/O Device and Sensors

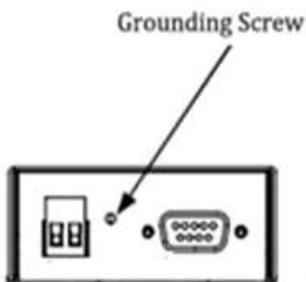
Digital Input Dry Contact:



Digital Output (Sink Type)



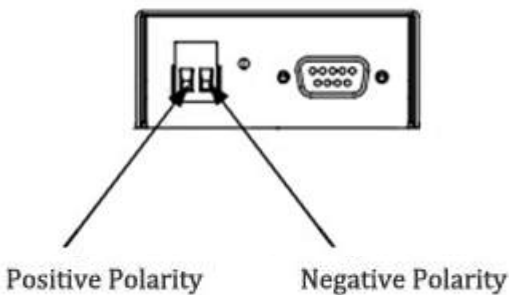
## 1.6 Grounding the Modem



Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

**Note:** This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel.

## 1.7 Power Supply



The power supply range is 9 to 36VDC.

**Note:** Please take care about the polarity, and do not make reverse connection.

## Chapter 2. Hardware Installation

### 2.1 Insert/Remove SIM Card

SIM card is used for connecting to cellular network, you need buy SIM card from local operators.

**Note:**

1. Don't forget to screw the cover for again-theft.
2. Don't touch the metal surface of the SIM card in case information in the card is lost or destroyed.
3. Don't bend or scratch your SIM card. Keep the card away from electricity and magnetism.
4. A SIM card set with PIN code cannot be used normally in the gateway without the correct PIN code.
5. Make sure to disconnect the power source from your modem before inserting and removing your SIM card.



### 2.2 Connect the External Antenna (SMA Type)

Connect this to an external antenna with SMA male connector. Make sure the antenna is for the correct frequency as your GSM operator with impedance of 50ohm, and also connector is secured tightly.



### 2.3 Power On and Connect with PC

User can use the serial cable to connect the modem's DB9 female connector to external controller / computer.



## Chapter 3. Operate the Modem

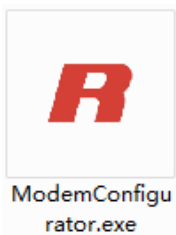
### 3.1 Modem Configurator Overview


Modem Configurator is a PC-based configuration software tool for managing and configuring Robustel M1000 series modems. With a full graphics mode and Windows-based environment, even first time users will find it easy to learn how to use this new software tool.

**Note:** Modem Configurator can be used with Windows 2000/XP/Vista/7 32/64-bit operation systems.

### 3.2 Starting Modem Configurator via Serial interface

1. Switch the modem to “Config Mode”, connect the RS-232 port of the modem to a host PC, then power on the modem.
2. Double click “Modem Configurator.exe” to start the software.

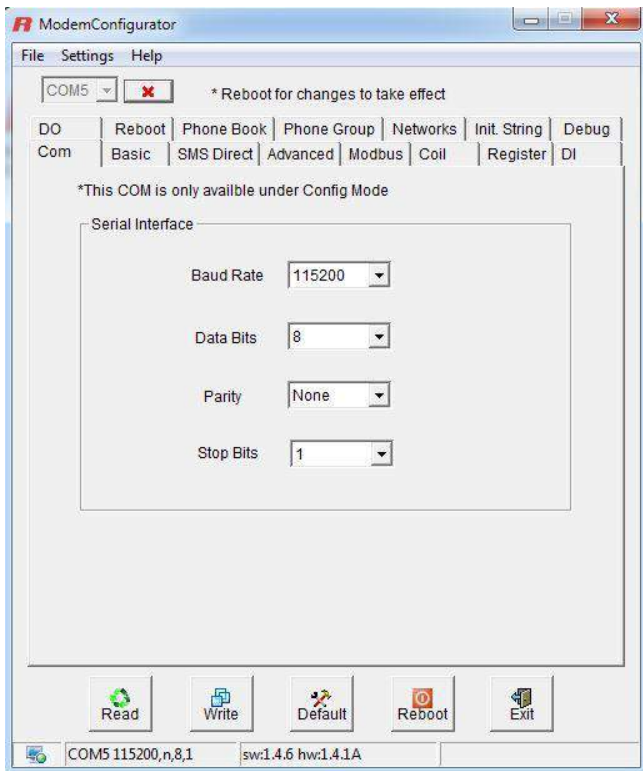


3. Select the correct serial port which is connecting to the modem, then click  button. After that you can

see the popup windows “Operation Succeed!”.



4. Configuring the modem via M1000 configurator.



**Note:** Please refer to **Robustel GoRugged M1000 User Guide** to get more details about M1000' configuration.