



# M1000 USB

Industrial Cellular USB Modem



## INTRODUCTION

The Robustel GoRugged M1000 USB is a rugged cellular modem with Mini USB interface offering state-of-the-art 2G (GPRS/EDGE)/3G (HSPA)/4G (LTE) connectivity for machine to machine (M2M) applications.

M1000 USB fully considers the needs of industrial applications in process design, and its technical performance fully meets industry standards. M1000 USB uses high-performance domestic and foreign advanced modules, supports mini USB2.0 interface, supports GPS positioning, and meets the needs of users in different applications.

Robustel is a leading global industrial IoT/M2M hardware and solution provider. In order to support global business in more than 100+ countries and regions, Robustel has set up local offices in Germany, Australia, the Netherlands, the UK, Japan and Hong Kong. The main application areas of the M1000 USB modem are: industrial computer connection and communication, automatic ticket machines and display information release.

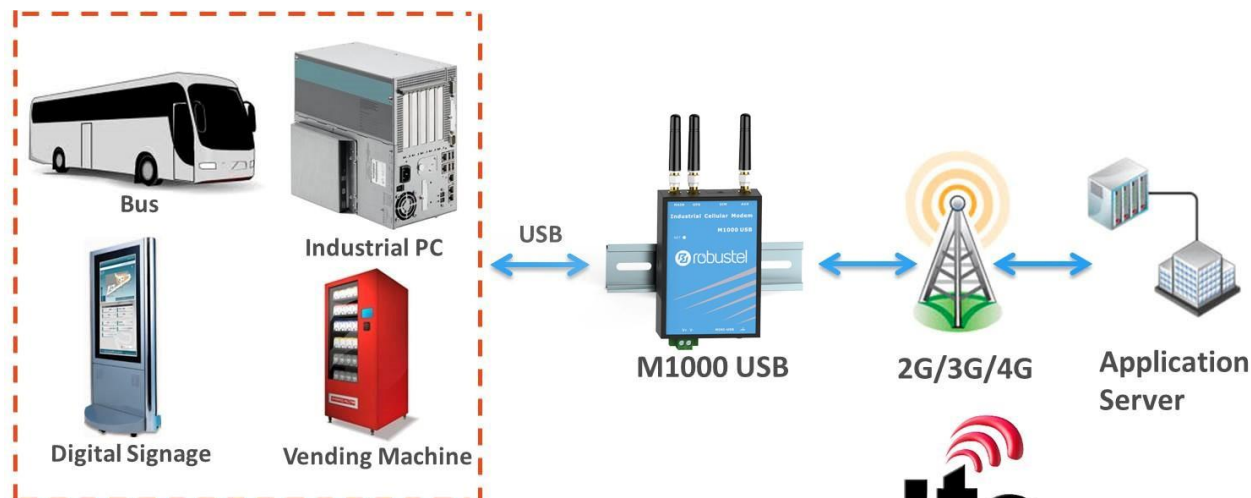
## KEY FEATURES

- > Control via AT commands
- > USB 2.0 high speed interface allows it to manage and optimize the performances of 3G and 4G high-speed network
- > LTE downlink/uplink up to 100/50 Mbps
- > GPS receiver optional for specified model
- > Antenna diversity for improved fringe performance optional
- > Comprehensive SDK and enabling drivers for Linux and Windows
- > Wide range input voltages from 12 to 36 VDC and extreme operating temperature
- > Robust industrial design (desktop or wall mounting or DIN rail mounting)

## PACKAGE CONTENTS

- > 1 x Robustel M1000 USB Industrial Cellular Modem
- > 1 x Mini USB cable
- > 1 x Terminal block for power
- > 1 x *Quick Start Guide* with download link of other documents or tools

## APPLICATION EXAMPLE



## SPECIFICATIONS

### Cellular Interface

Connector	SMA-K
SIM	1 (3 V & 1.8 V)
Standards	LTE/HSPA+/HSUPA/HSDPA/UMTS/EDGE/GPRS
LTE	max. 100/50 Mbps (DL/UL)
UMTS	max. 384 kbps (DL & UL)

### USB Interface

Number of ports	1 x mini Type A, female
Speed	USB 2.0 High Speed (480 Mbit/s)
ESD protection	15 KV

### GPS (optional for M1000-U3P and M1000-U4L)

Protocol	NMEA
Modes	Standalone GPS, Assisted GPS

### Drivers

Drivers	Multi-O/S
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### System

LED indicator	1 x NET
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### Power Supply and Consumption

Connector	2-pin 5 mm pluggable terminal block with lock
Input voltage	12 to 36V DC

### Physical Characteristics

Housing & Weight	Metal, 300 g
Dimensions	102 x 71 x 29 mm
Installations	Desktop, wall mounting and 35 mm DIN rail mounting

### Approvals

Regulatory	CE, EAC
Application	E-mark (Vehicle), N 45545-2 (Railway Applications - Fire Behaviour)
Environmental	RoHS2.0, WEEE

## ORDERING INFORMATION

Model	M1000-U4L	M1000-U3P	M1000-USB
Air Interface	GSM/GPRS/EDGE/HSDPA/HSUPA/HSPA +/UMTS/DC-HSPA+/TD-SCDMA/FDD LTE/TDD LTE	GSM/GPRS/EDGE/HSDPA/HSUPA/HSPA+ MTS	-
Frequency Bands*	Global: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28; B38/B39/B40/B41 EMEA: B1/B3/B5/B7/B8/B20; B38/B40/B41	-	-
4G	Global: B1/B2/B4/B5/B6/B8/B19 EMEA: B1/B5/B8	B1/B2/B8/B5/B6	-
3G	Global: B2/B3/B5/B8 EMEA: B3/B8	B2/B3/B5/B8	-
Operating Temperature	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Storage Temperature	-40 to +85 °C	-40 to +85 °C	-40 to +85 °C
Relative Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH

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