

**Copyright © 2010 Huawei Technologies Co., Ltd.**

### **All Rights Reserved**

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

### **Trademarks and Permissions**



**HUAWEI** and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

### **Notice**

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute the warranty of any kind, express or implied.

# Table of Contents

Getting to Know the MG323.....	1
Installing and Using an MG323 Module.....	2
Removing an MG323 Module from a Development Board.....	4
Safety Information.....	<b>错误! 未定义书签。</b>

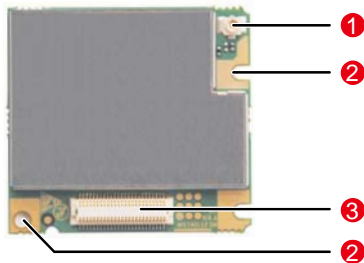
## Thank you for purchasing Huawei MG323 Wireless Module.

### Note:

- This manual briefly describes the preparation, the process for installing/uninstalling, and safety precautions for using Huawei MG323 Wireless Module (hereinafter referred to as the MG323).
- You are recommended to read the manual before using the MG323.
- The signal strength and the transmission rate are affected by the actual environment.

## Getting to Know the MG323

The following figure shows the appearance of the MG323. The actual product may differ.



## ❶ Antenna interface

It is used to connect and fix an antenna.

- The antenna gain: 850M<4.28dBi, 1900M<3.0dBi

## ❷ Fixing hole

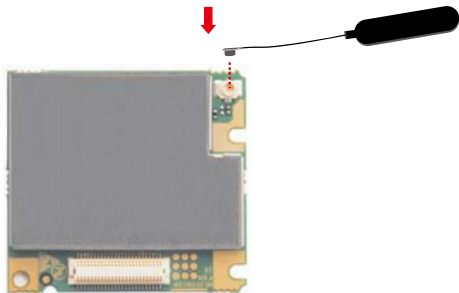
A screw, metal fastener, and nut are used to fix an MG323 module on a development board through this fixing hole.

## ❸ Board-to-board (B2B) connector (male)

It is connected to the B2B connector (female) on the development board.

# Installing and Using an MG323 Module

1. Connect an antenna connector to the antenna interface of an MG323.



#### NOTE

Connect the antenna connector vertically to the antenna interface of the MG323. Ensure that the antenna is placed normally.

2. Fasten the male B2B connector on the MG323 module with the female B2B connector of a development board to fix the MG323 module on the development board.
3. Place a metal fastener between the MG323 module and the development board, and put a screw through the fixing hole of the MG323, metal fastener, and fixing hole of the development board in turn. After putting the screw through the fixing hole of the development board, fasten a nut on the screw.
4. Insert a SIM card into the SIM card slot.
5. Use a serial cable to connect a PC with the MG323 module through the RS-232 serial port for software communication.

6. To use the MG323 module normally, put jumper caps on the right two pins of the three pins within the red box shown in the following figure to form a short circuit.
7. Connect a handset to the handset interface for testing voice-related functions.
8. Connect an external 5 V power adapter to the MG323 module through the power interface.
9. Turn the switch towards the power interface to supply power to the MG323 module.

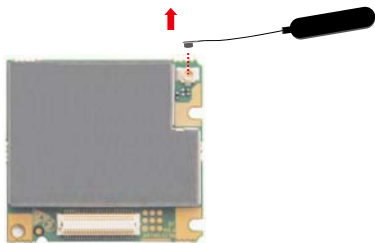
If you turn the power switch towards the USB interface, the MG323 can charge external batteries.

10. After you press and hold the power button for about one second, the MG323 module is powered on. To power off the module, press and hold this button for two seconds.
11. After you press and hold the reset button for about one second, the MG323 module is reset.

## Removing an MG323 Module from a Development Board

1. Perform the following steps to remove the peripheral:
  - 1) If the MG323 module is powered on, press and hold the power button for two seconds to power off the module. Then remove the external 5 V power adapter.
  - 2) Remove the serial cable.
  - 3) Remove the SIM card from the SIM card slot.

2. Remove the screw on the MG323 module.
3. Remove the MG323 module from the development board.
4. Remove the antenna from the MG323 module.



# Safety Information

Read the safety information carefully to ensure the correct and safe use of your wireless device.

## Interference

Do not use your wireless device if using the device is prohibited or when it causes danger or interference with electric devices.

## Medical Device

- Do not use your wireless device and follow the rules and regulations set forth by the hospitals and health care facilities.
- Some wireless devices may affect the performance of the hearing aids. For any such problems, consult your service provider.
- If you are using an electronic medical device, consult the doctor or device manufacturer to confirm whether the radio wave affects the operation of this device.

## Area with Inflammables and Explosives

To prevent explosions and fires in areas that are stored with inflammable and explosive devices, do not use your wireless device and observe the rules. Areas stored with inflammables and explosives include but are not limited to the following:

- Gas station
- Fuel depot (such as the bunk below the deck of a ship)
- Container/Vehicle for storing or transporting fuels or chemical products



- Area where the air contains chemical substances and particles (such as granule, dust, or metal powder)
- Area indicated with the "Explosives" sign
- Area indicated with the "Power off bi-direction wireless equipment" sign
- Area where you are generally suggested to stop the engine of a vehicle

## **Traffic Security**

- Observe local laws and regulations while using the wireless device. To prevent accidents, do not use your wireless device while driving.
- RF signals may affect electronic systems of motor vehicles. For more information, consult the vehicle manufacturer.
- In a motor vehicle, do not place the wireless device over the air bag or in the air bag deployment area. Otherwise, the wireless device may hurt you owing to the strong force when the air bag inflates.
- Observe the rules and regulations of airline companies. When boarding, switch off your wireless device. Otherwise, the radio signal of the wireless device may interfere with the plane control signals.

## **Safety of Children**

Do not allow children to use the wireless device without guidance. Small and sharp components of the wireless device may cause danger to children or cause suffocation if children swallow the components.

## **Environment Protection**

Observe the local regulations regarding the disposal of your packaging materials, used wireless device and accessories, and promote their recycling.

## **WEEE Approval**

The wireless device is in compliance with the essential requirements and other relevant provisions of the Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE Directive).

## **RoHS Approval**

The wireless device is in compliance with the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive 2002/95/EC (RoHS Directive).

## **Laws and Regulations Observance**

Observe laws and regulations when using your wireless device. Respect the privacy and legal rights of the others.

## **Care and Maintenance**

It is normal that your wireless device gets hot when you use or charge it. Before you clean or maintain the wireless device, stop all applications and power off the wireless device.

- Use your wireless device and accessories with care and in clean environment. Keep the wireless device from a fire or a lit cigarette.
- Protect your wireless device and accessories from water and vapor and keep them dry.
- Do not drop, throw or bend your wireless device.
- Clean your wireless device with a piece of damp and soft antistatic cloth. Do not use any chemical agents (such as alcohol and benzene), chemical detergent, or powder to clean it.
- Do not leave your wireless device and accessories in a place with a

considerably low or high temperature.

- Use only accessories of the wireless device approved by the manufacture. Contact the authorized service center for any abnormality of the wireless device or accessories.
- Do not dismantle the wireless device or accessories. Otherwise, the wireless device and accessories are not covered by the warranty.

## **Emergency Call**

This wireless device functions through receiving and transmitting radio signals. Therefore, the connection cannot be guaranteed in all conditions. In an emergency, you should not rely solely on the wireless device for essential communications.

## **Regulatory Information**

The following approvals and notices apply in specific regions as noted.

### **CE Approval (European Union)**

The wireless device is approved to be used in the member states of the EU. The wireless device is in compliance with the essential requirements and other relevant provisions of the Radio and Telecommunications Terminal Equipment Directive 1999/5/EC (R&TTE Directive).

Federal Communications Commission Notice (United States): Before a wireless device model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

For the declaration of conformity, visit the Web site [www.huaweidevice.com/certification](http://www.huaweidevice.com/certification).

Notice: Observe the national local regulations in the location where the device is to be used. This device may be restricted for use in some or all countries of European Union.

## **FCC Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

\* This device should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

**Warning:** Changes or modifications made to this equipment not expressly approved by HUAWEI may void the FCC authorization to operate this equipment.