

MG8 User Manual (test version)

Basic Specifications

Model	MG8
Color	White
Size	31*62.55*14.5mm
Weight	<23g
IP Rating	/
LED	1 pc RGB LED Blue, Start / OTA; Green, Cellular; Red, Key feedback
Button	1
SIM	Nano SIM
Operating Temperature	-20~60℃
Stocking Temperature	20~35℃ Recommaded
FOTA	Bluetooth App OTA; MQTT remote OTA;
Configuration	MQTT Remote Configuration
Transmit Protocal	MQTT Supported

Bluetooth Specifications

Bluetooth version	Bluetooth® LE 5.0
Bluetooth band	2.4 GHz, 40 channels (2400 ~ 2483.5 MHz)
Bluetooth modulation	GFSK

Cellular Specifications	
Cellular Connection	LTE Cat.1
Cellular Networks Bands	LTE-FDD B2/ 4/7/ 25/66 LTE-TDD B38/ 41
Cellular Data Rate (Mbps)	LTE-FDD 10 (DL) / 5 (UL) LTE-TDD 8.96 (DL) / 3.1 (UL)

Device Operation

SIM Card Installation



- ① Place the SIM card into the card tray as shown in the picture.



- ② The SIM card is inserted into the slot with the chip up as shown.



- ③ The installation is completed as shown in the picture.

Device Function

Function Button

Pressing the function button for 3s, the badge will be in working mode while the red light flashes 3 times. Pressing the function button for 3s again, the badge will exit working mode while the red light is on for 3s.

Light

Cellular pilot light: **Green** LED

- If the cellular LTE base station network is normal and the MQTT server connection is successful, the green light will be on for 5 seconds.
- If the cellular LTE network is abnormal, the green light will keep flashing quickly.
- If the server cannot be connected, the green light will keep flashing slowly.

Device status pilot light:

Blue LED

- When the badge opens, the blue light will be on for 3 s.
- Blue light blinks slowly when the device is being upgraded.

Red LED

- Pressing the function button for 3s, the red light flashes 3 times. Pressing the function button for 3s again, the red light is on for 3s.

FCC Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help
- 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 equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

FCC/IC RF Radiation Exposure and SAR Statements

The Tiny LTE Cellular Gateway MG8 has been tested for body-worn Specific Absorption Rate(SAR) compliance. The FCC/IC has established detailed SAR requirements and has established that these requirements. RF Exposure Information The radio module has been evaluated under FCC Bulletin C95.1 and IEEE 1528 and found to be compliant

to RF Exposure from radio frequency devices. This model meets the applicable government requirements for exposure to radio frequency waves. The highest reported SAR level for usage near the body (0mm) is 1.298W/kg, Body Simultaneous Transmission is 1.581W/kg at the same time.