# **BEAM Communications Pty Ltd**

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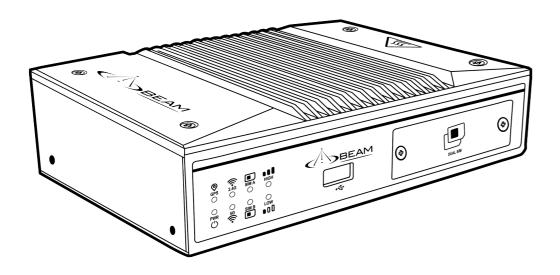
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# MG400 LTE GATEWAY Quick Start Guide



# **Package Contents**

Before commencing installation ensure your package has the following components:

☐ 1 x MG400 unit

2 x Wi-Fi antenna

2 x LTE antenna

☐ 1 x 8PIN terminal block

☐ 1 x AC power adapter with AU plug

1 x Fused DC power cable with IGN (ignition wire)

☐ 2 x Mounting bracket

1 x Screw bag
(Zinc grounding screw x 1, Black screw x 3

1 x Quick Start Guide

1 x Spare device label

# **Optional Accessory** (not supplied)

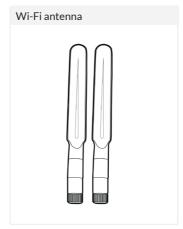
☐ GPS antenna

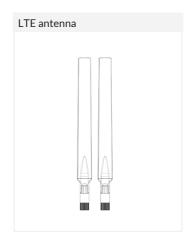
# MG400 FRONT PANEL

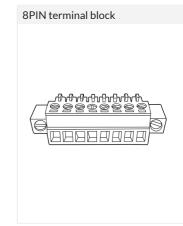
| s:       | A = STATUS LED                                     |                        | <b>B</b> = USB PORT      |               | C = SIM          | <b>●</b> = SIM CARD SLOT |  |
|----------|--|------------------------|--------------------------|---------------|------------------|--------------------------|--|
|          | 1.GPS  | 5. Power               |                          |               | 9. SIM A         | <b>11.</b> Reset Button  |  |
|          | <b>2</b> .2.4GWi-Fi                                | 6.5GWi-Fi              |                          |               | <b>10.</b> SIM B |                          |  |
|          | 3.SIMAinuse  | 7.SIMBinuse            |                          |               |                  | a (1)                    |  |
|          | 4. LTE signal high                                 | 8. LTE signal low      |                          |               | 9 10             | 11)                      |  |
| F        | 1 2 3  | 4)                     | SIM AGCELL 1SIM Bd RESET |               |                  |                          |  |
|          |  |                        |                          |               |                  | -                        |  |
| <b>A</b> | GPS 24G SIMA ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ | HIGH O LOW LOW O D D D | BEAN                     | 1             | DUAL SIM         | *                        |  |
|          |  | 8                      | •                        |               | G                |                          |  |
|          | REAR PANEL   | (a)                    | a                        | <b>6 1</b>    | 0                |                          |  |
| _        |  | $ \frac{1}{2}$         |                          |               |                  |                          |  |
|          |  |                        | 2.4G/5G<br>Wi-Fi         | VAN/LAN1 LAN2 | AM CE            | LL 2.4/5G                |  |

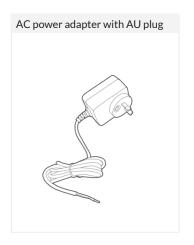
| <b>(D)</b> : LTE antenna port main | G: WLAN/LAN1 port (RJ45) | ①: LTE antenna port aux     |
|------------------------------------|--------------------------|-----------------------------|
| E : Terminal block                 | : LAN2 port (RJ45)       | <b>€</b> : GPS antenna port |
| 🔁 : Wi-Fi antenna port             | ●: LAN3 (RJ45)           | : Wi-Fi antenna port        |

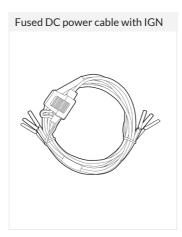
# MG400 Accessories in the box

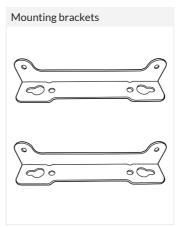


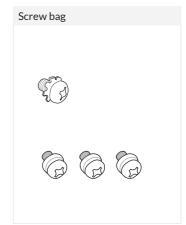














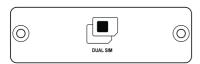
#### 1. Installing your SIM Card

Tools required:

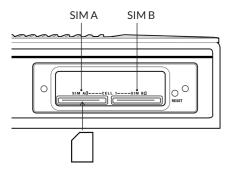
1 x Philips-head screwdriver size 1 (not supplied)

Follow the instructions below:

a. Unscrew 2x screws on SIM cover and remove the cover.



b. Insert SIMs into SIM A and SIM B slots.

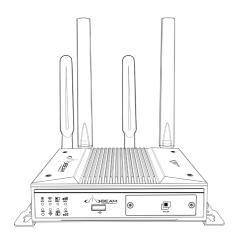


c. Fit cover back to its original position.



# 2. MG400 Orientation

The MG400 can be installed on a flat surface or mounted on a wall.

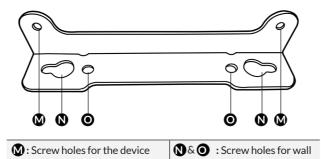


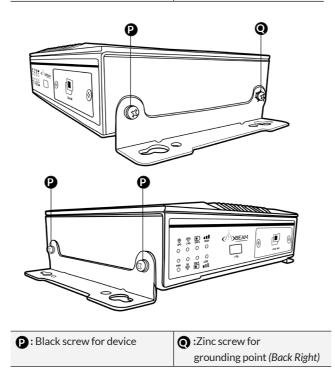


- 1. Leave enough room around the MG400 to allow easy access to the rear panel for antenna installation.
- 2. For installation with external antennas (on the roof of a building or on the pole of a boat), it is highly recommended to screw a grounding cable to the grounding point of the device.
- 3. Make sure there is a 1cm clearance from the top of the unit.

# 3. Mounting your MG400 LTE GATEWAY

The MG400 comes with mounting brackets that allow mounting for mobile and fixed positioning.

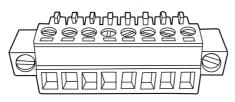




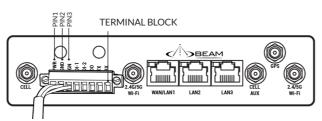
#### 4. Power your MG400 LTE GATEWAY

a. Connect the power supply with AC plug pack provided. With AC power turned OFF, screw power leads to terminal block, red lead in PIN1, black lead in PIN2. Then screw the terminal block onto the device.

#### TERMINAL BLOCK

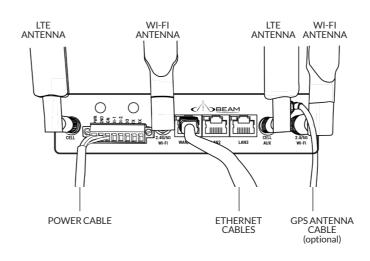


b. When connecting direct to DC power source (12V 2A or 24V 1A), with DC power turned OFF, screw power leads to terminal block, red lead to PIN1, black lead to PIN 2. Then screw terminal block onto the device.



c. When installing in a vehicle, with DC power turned OFF, screw the yellow IGN (ignition) cable to terminal block PIN3. Then screw the terminal block onto the device. Ignition sense can be activated via web GUI, Service > Power Control.

# 5. Connect LTE antenna, Wi-Fi antenna, GPS antenna (optional) and Ethernet cables if needed.



#### 6. Power Up & Configure your MG400

Switch power ON. Allow up to 3 minutes for the device to boot up.

# 7. Connecting to the admin web GUI

The web GUI can be accessed via Wi-Fi or Ethernet.

#### Connecting via Wi-Fi

On your client device (e.g. laptop, tablet), connect to the SSID labelled "BEAM\_2.4GHz\_XXXX" or "BEAM\_5GHz\_XXXX" where "XXXX" is four randomly generated numbers. The unique SSID and password for the wireless networks are printed on the device label. Continue to the "Accessing the web GUI" section.

#### Connecting via Ethernet cable

Connect a standard straight-through Ethernet cable to your client PC and the other end to any of the LAN ports on the back of the device. Continue to "Accessing the web GUI" section.

#### 8. Accessing the web GUI

Open a web browser on your client device, enter the URL http://192.168.123.254

Enter the default username: admin and default password: admin. On your first login, use the setup wizard to configure Administrator password, Time Zone, Wi-Fi Module, APN Setting.



#### NOTE:

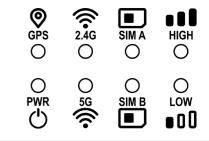
It is highly recommended that you change the admin password during the installation.

#### 9. For PIN locked SIM card, unlocking the SIM card.

Navigate to Network > WAN & Uplink > Connection Setup> WAN-1 > Edit > Connection with SIM-A / SIM B card > PIN Code to enter the PIN Code. Click the Save button to save your changes.

# 10. Verify the LTE connection status

When your MG400 is connected to Internet, the "HIGH" or "LOW" LED on the front panel lights up to indicate the current received signal level.



| LED         | DESCRIPITION  |
|-------------|---|
| GPS         | OFF: GPS function is disabled, GPS antenna is disconnected, or there is no GPS signal. Steady ON: GPS signal is locked. Flashing: the device is searching for GPS signal, no GPS lock   |
| PWR         | OFF: Device is powered OFF or in standby mode. Steady ON: Device is in working mode. Slow Flashing: Firmware is upgrading or device is in Delay OFF mode Fast Flashing: Firmware is upgrading, or device is in recovery mode. |
| 2.4G        | OFF: 2.4GHz Wi-Fi is disabled.<br>Steady ON: 2.4G Wi-Fi is enabled.<br>Fast Flashing: Data is transferred through 2.4G Wi-Fi.   |
| 5G          | OFF: 5G Wi-Fi is disabled.<br>Steady ON: 5G Wi-Fi is enabled.<br>Fast Flashing: Data is transferred through 5G Wi-Fi.   |
| SIM A       | OFF: SIM card A is not inserted or not used for 3G/4G connection. ON: SIM card A is inserted and active.  |
| SIM B       | OFF: SIM card B is not inserted or not used for 3G/4G connection. ON: SIM card B is inserted and active.  |
| HIGH<br>LOW | HIGH + LOW OFF: 3G/4G network is disconnected. HIGH ON: 3G/4G network is connected, signal strength is at high level >= 50% LOW ON: 3G/4G network is connected, signal strength is at low level < 50%                         |

# 11. Check the connection status

From the web GUI, navigate to Status > Dashboard and confirm that there is a 3G/4G Interface displayed under the Network Interface Status table.

| ■ Net   | Network Interface Status |                   |                     |                              |                                |  |  |  |  |  |
|---------|--------------------------|-------------------|---------------------|------------------------------|--------------------------------|--|--|--|--|--|
| Device  | Туре                     | Upload<br>Traffic | Download<br>Traffic | Current<br>Upload<br>Traffic | Current<br>Download<br>Traffic |  |  |  |  |  |
| eth2    | Ethernet                 | 7 (MB)            | 3 (MB)              | 28 (KB)                      | 4 (KB)                         |  |  |  |  |  |
| eth2.1  | Ethernet                 | 4 (MB)            | 1 (MB)              | 28 (KB)                      | 3 (KB)                         |  |  |  |  |  |
| br0     | Ethernet                 | 4 (MB)            | 1 (MB)              | 28 (KB)                      | 3 (KB)                         |  |  |  |  |  |
| ra0     | Wireless<br>LAN          | 0 (Bytes)         | 0 (Bytes)           | 0 (Bytes)                    | 0 (Bytes)                      |  |  |  |  |  |
| rai0    | Wireless<br>LAN          | 0 (Bytes)         | 0 (Bytes)           | 0 (Bytes)                    | 0 (Bytes)                      |  |  |  |  |  |
| usbnet0 | 3G/4G                    | 1 (MB)            | 2 (MB)              | 720 (Bytes)                  | 23 (Bytes)                     |  |  |  |  |  |

#### 12. Test Internet access

Use a web browser on client device (mobile phone, laptop, tablet) open an online web page, for example: www.beamcommunications.com