GXX-3GUx Series 3G Modem
User Manual
# Document Revision

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<tr>
<td>1</td>
<td>18.12.2014</td>
<td>First issue</td>
<td>JON</td>
</tr>
<tr>
<td>2</td>
<td>06.01.2015</td>
<td>Review</td>
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<td>3</td>
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<td>Updates and corrections</td>
<td>JON</td>
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<td>4</td>
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1. Overview

The 3G modem series GXX-3GU consists of GXX-3GUI and GXX-3GUE subtypes for use internally and externally with a GMSplus. GXX-3GUI is conveniently installed inside the GMSplus and with an antenna connection to the outside. GXX-3GUE is installed in an IP65 rated housing with durable cable for connecting to the GMSplus, which makes it suitable for installation at a distance of the GMSplus.

2. Installation of the SIM Card

Before proceeding, please make sure that:
- SIM card is not locked by a PIN code.
- the modem is NOT powered.

2.1. GXX-3GUE

- Open the housing of the modem by unscrewing the four screws at the corners.
- Use a pointed tool e.g. a screwdriver to press the small yellow button and open the SIM card slot as shown in Figure 3. To have better access to the SIM card slot the USB connector (green & green/white wires) and the antenna can be carefully removed if required.
- Add, remove or change the SIM card and push the slot back.
- If required, reconnect the USB connector and the antenna.
- Close the housing of the modem.
- Connect the cable to the SERIAL connector of the GMSplus, which works as a USB port.
2.2. GXX-3GUI

Below is depicted the internal version of the 3G modem. The modem is installed inside the GMSplus. The SIM card can be safely installed by removing the black cover and gently clicking it in to its slot.

![Figure 4. SIM Card Slot on GXX-3GUI](image)

3. Hardware Configuration

3.1. Preparation of the GMSplus

The GXX-3GUx series normally are delivered with all necessary preparations readily made in the GMSplus, however if this is not the case (e.g. the modem was bought later) the following procedure can be followed.

Make sure that armdas firmware on the GMSplus is 21.05.00 or higher. Otherwise download the newest firmware from www.geosig.com → Support → Downloads. For information regarding the upgrade, refer to chapter 12 of the GMSplus User Manual.

The GMSplus hardware is normally prepared for the 3G modem. To check this, follow below steps:

- Switch off the GMSplus instrument
- Disconnect the power supply and open the GMSplus housing cover by unscrewing the four screws in the corners.
- Disconnect the battery and unscrew the black protective cover.
- Check that the jumper JMP26 is set to the upper position (Pin 1-2)
- Check that the jumpers JMP23, JMP24, JMP25 are set to the lower position (Pin 2-3)
• Keep the APN, login and password provided by our mobile phone provider ready.
• Configure the GMSplus instrument according to the chapter 10.8.3 Connection over PPP (Cellular Modem or analog Phone Line) of the GMSplus User Manual.

4. Electrical Connection

4.1. GXX-3GUE

The GXX-3GUE modem comes with a preinstalled cable for connecting directly to the GMSplus's “SERIAL” connector which works as a USB port, as shown in Figure 6.

The pin-out for the connector at the end of the cable is also provided for convenience in Figure 7.

Figure 5. Standard jumper settings on the GMSplus connector board for GXX-3GU modem

Figure 6. Connection diagram

Figure 7. Pin-out for GXX-3GUE
4.2. GXX-3GUI

The GXX-3GUI does not require any connections to be made, as it is already connected at factory.

5. Mounting

The GXX-3GUE can be mounted on horizontal or vertical surfaces using 4 bolts according to the below drawing.

Figure 8. Drawing for mounting of GXX-3GUE (units: mm)