



GXX-3GUx Series 3G Modem User Manual



Document Revision

Version	Date	Modification	Author
1	18.12.2014	First issue	JON
2	06.01.2015	Review	TAB
3	07.01.2015	Updates and corrections	JON
4	07.01.2015	Review	TAB

Disclaimer

GeoSIG Ltd reserves the right to change the information contained in this document without notice. While the information contained herein is assumed to be accurate, GeoSIG Ltd assumes no responsibility for any errors or omissions.

Copyright Notice

No part of this document may be reproduced without the prior written consent of GeoSIG Ltd. Software described in this document is furnished under a license and may only be used or copied in accordance with the terms of such a license.

Trademark

All brand and product names mentioned are trademarks or registered trademarks of their respective holders.

All rights reserved.

GeoSIG Ltd

Switzerland

Table of Contents

1. Overview	4
2. Installation of the SIM Card	4
2.1. GXX-3GUE	4
2.2. GXX-3GUI	5
3. Hardware Configuration	5
3.1. Preparation of the GMSplus	5
4. Electrical Connection	6
4.1. GXX-3GUE	6
4.2. GXX-3GUI	7
5. Mounting	7

Table of Figures

Figure 1. GXX-3GUE.....	4
Figure 2. GMSplus with GXX-3GUI.....	4
Figure 3. Open the SIM card slot by pushing the yellow button with a screwdriver	4
Figure 4. SIM Card Slot on GXX-3GUI.....	5
Figure 5. Standard jumper settings on the GMSplus connector board for GXX-3GU modem	6
Figure 6. Connection diagram	6
Figure 7. Pin-out for GXX-3GUE	6
Figure 8. Drawing for mounting of GXX-3GUE (units: mm)	7

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.



Figure 1. GXX-3GUE



Figure 2. GMSplus with GXX-3GUI

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.

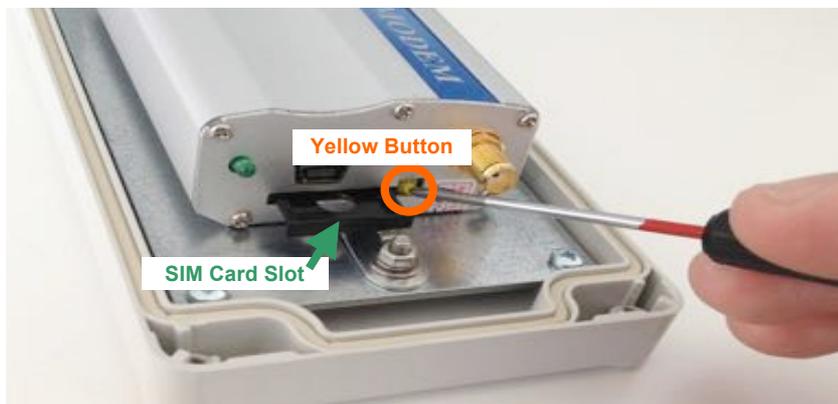


Figure 3. Open the SIM card slot by pushing the yellow button with a screwdriver

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.

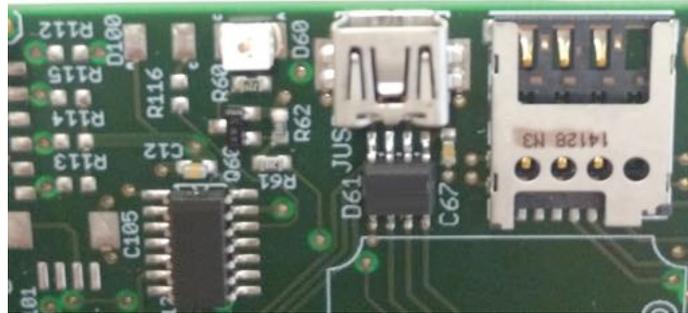


Figure 4. SIM Card Slot on GXX-3GUI

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)

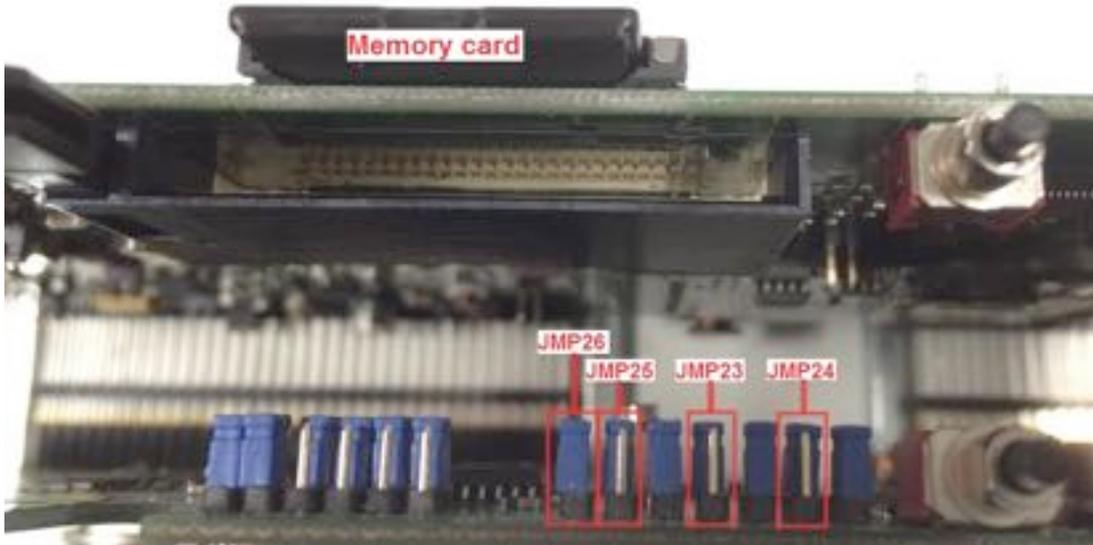


Figure 5. Standard jumper settings on the GMSplus connector board for GXX-3GU modem

- 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.

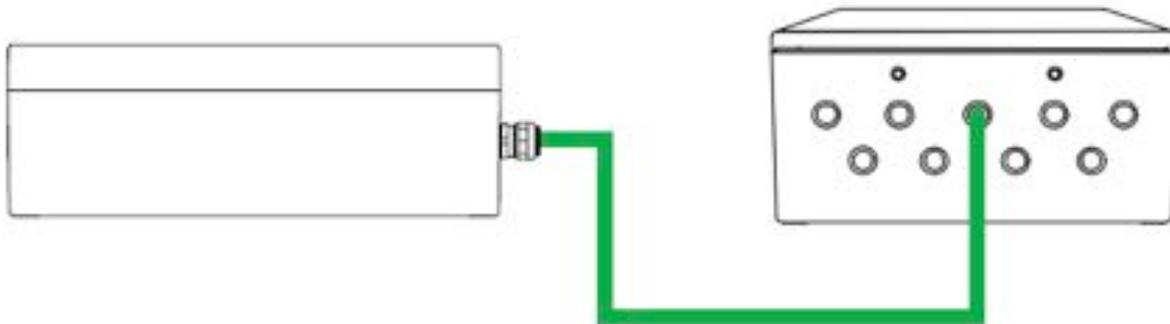


Figure 6. Connection diagram

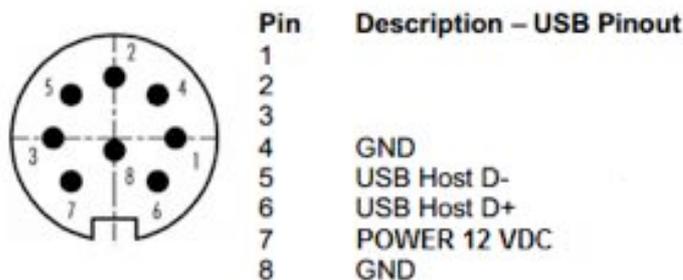


Figure 7. Pin-out for GXX-3GUE

4.2. GXX-3GUI

The GXX-3UI 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

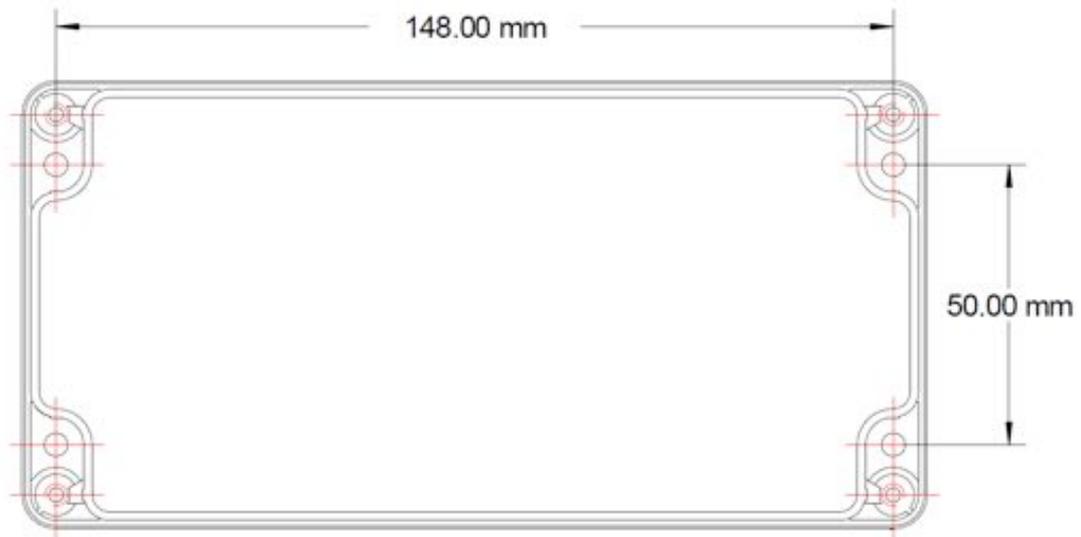


Figure 8. Drawing for mounting of GXX-3GUE (units: mm)