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GXX-4GUE Series Modem
User Manual

Document Revision

Version	Date	Modification	Author
1	01.12.2021	First issue (Based on GXX-3GU user manual V05)	RES
2	12.05.2022	Bug fixes	VAG

Table of Contents

Table of Figures

1. Overview

The 4G modem series GXX-4Gx is currently only available for external use with a GMSplus. The GXX-4GUE 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-4GUE

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-4GUE

- Open the housing of the modem by pushing down the four screws on the corners of the housing using a screwdriver and turning the screws ~45° anti clockwise.

- 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.

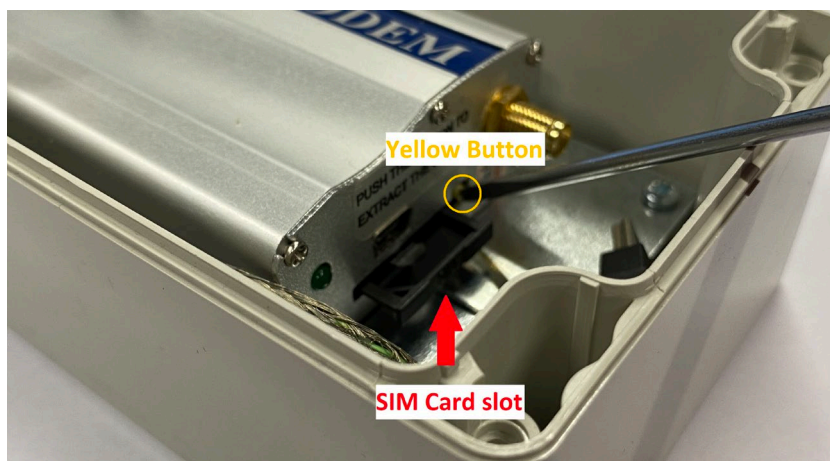- Connect the cable to the SERIAL connector of the GMSplus, which works as a USB port.

Figure 2. Open the SIM card slot by pushing the yellow button with a screwdriver

3. Hardware Configuration

3.1. Preparation of the GMSplus

The GXX-4GUE 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 21.12.27 (gsfw-r148) or higher. Otherwise download the newest firmware from www.geosig.com → Support → Downloads. For information regarding the upgrade, refer to chapter 11 of the GMSplus User Manual.*

The GMSplus hardware is normally prepared for the 4G 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)

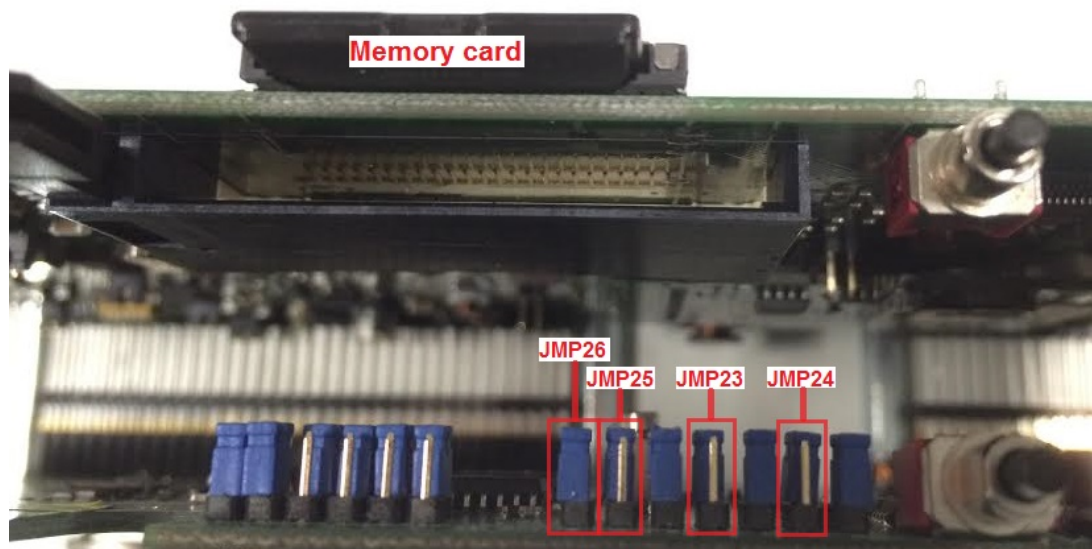- Check that the jumpers JMP23, JMP24, JMP25 are set to the lower position (Pin 2-3)

Figure 3. Standard jumper settings on the GMSplus connector board for GXX-4GU modem

- Keep the APN, login and password provided by our mobile phone provider ready.

- Configure the GMSplus instrument according to the **chapter *9.8.3 Connection over PPP (Cellular Modem or analog Phone Line)* of the GMSplus User Manual.

4. GXX-4GUE Electrical Connection

The GXX-4GUE 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 4.

The pin-out for the connector at the end of the cable is also provided for convenience in Figure 5.
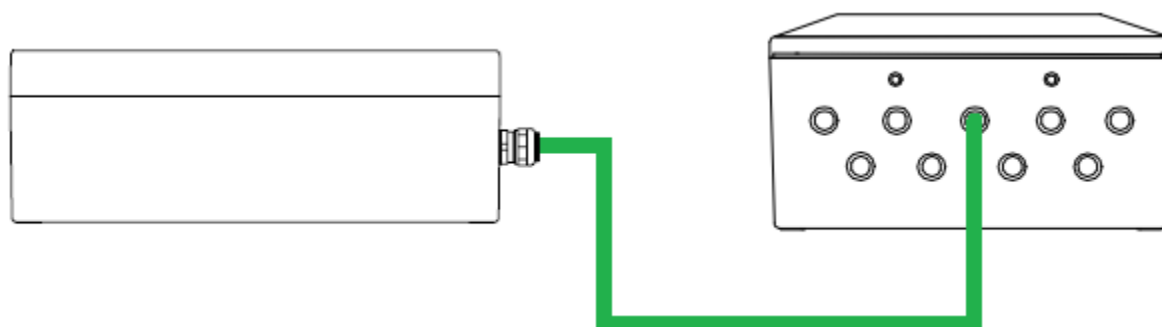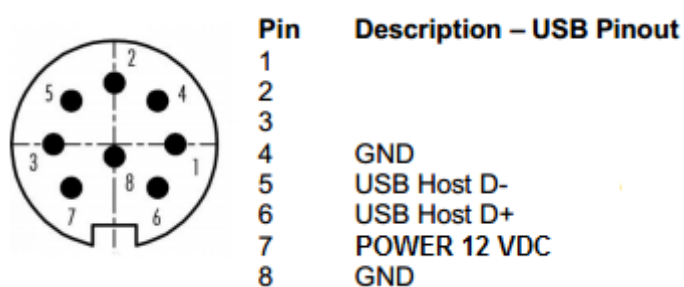
Figure 4. Connection diagram

Pin	Description – USB Pinout
1	
2	
3	
4	GND
5	USB Host D-
6	USB Host D+
7	POWER 12 VDC
8	GND

Figure 5. Pin-out for GXX-4GUE

5. Mounting

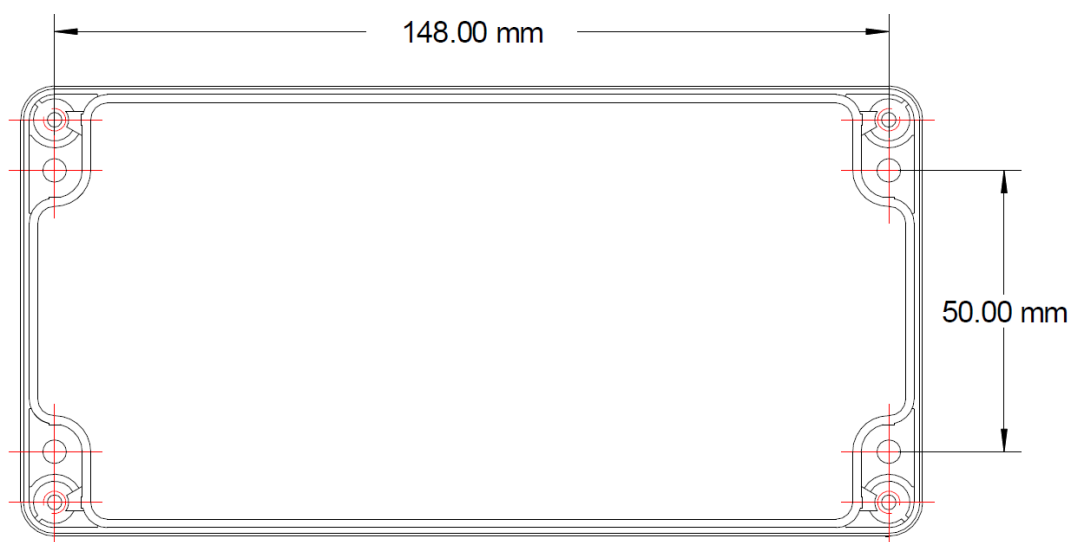The GXX-4GUE can be mounted on horizontal or vertical surfaces using 4 bolts according to the below drawing

Figure 6. Drawing for mounting of GXX-4GUE (units: mm)