

# Xantrex™ Grid Tie Solar Inverter Baud Rate Change Procedure

## Application Note

GT

976-0216-01-01 Rev C

THIS APPLICATION NOTE IS IN ADDITION TO, AND INCORPORATES BY REFERENCE, THE RELEVANT PRODUCT MANUAL FOR EACH INVERTER IN THE GT SERIES OF INVERTERS. BEFORE REVIEWING THIS APPLICATION NOTE YOU MUST READ THE PRODUCT MANUAL.

This Application Note provides procedures for changing the baud rate for a Xantrex Grid Tie Solar Inverter and for the Xantrex Communication Gateway. The baud rate change must be done separately for each inverter using an RS-232 cable and a laptop.

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### Important:

To change the baud rate, the Gateway Application firmware must be version 1.06 or higher. For GT-SP, GT-DE, and GT-KO models rated under 4kW, the GT Application 2.xx.yy firmware must be version 2.07.07 or higher. For all other models, the GT Application 3.xx.yy firmware must be version 3.05.07 or higher.

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Perform the steps in both of the following procedures to change the baud rate for the Gateway and inverter(s). If you do not have the Gateway, then skip to the second procedure.

- Gateway Application Baud Rate Change Procedure
- GT Application Baud Rate Change Procedure

## Gateway Application Baud Rate Change Procedure

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### Important:

To change the baud rate, the Gateway Application firmware must be version 1.06 or higher.

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### Manual Required

Communications Gateway Installation Guide (975-0330-01-01) available on [www.xantrex.com](http://www.xantrex.com).

### Change Procedure

1. Make sure the Gateway is powered via the Xanbus™ network.
2. Connect to the Gateway via the web configuration page. See the Communications Gateway Installation Guide if you need instructions on how to connect to the web page.

3. Select the new baud rate for the Gateway:
  - a. Click **Home** to expand the menu.
  - b. Select the new baud rate value (125 kbps or 250 kbps) for the **Xanbus Baud Rate**.
  - c. Click **Change Baud Rate** to send the new baud rate value to the Gateway.

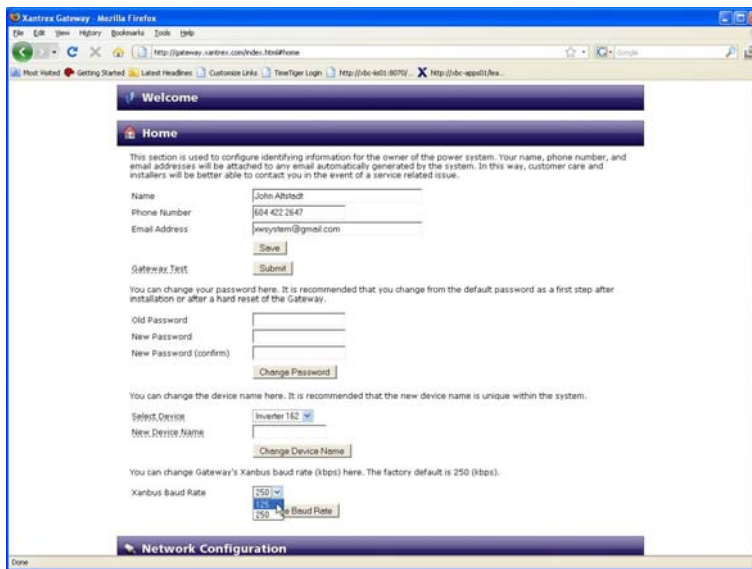


Figure 1: Select the New Baud Rate

4. Allow the web configuration page to refresh. This will take approximately 10 – 15 seconds, and then the web page will indicate that the update is complete.
5. Disconnect the Gateway from the Xanbus network.

## GT Application Baud Rate Change Procedure

### Important:

To change the baud rate for GT-SP, GT-DE, and GT-KO models rated under 4kW, the GT Application 2.xx.yy firmware must be version 2.07.07 or higher. For all other models, the GT Application 3.xx.yy firmware must be version 3.05.07 or higher.

### Hardware Tools Required

- Laptop with RS-232 serial port (or USB to serial converter)
- Straight thru RS-232 cable
- CANbus network analysis tool (for example, Maretron N2KMeter)

### Software Tool Required

GTBaudRateConverter (Xantrex Part Number 155-0029-01-00)

## Change Procedure

1. Make sure that the GTBaudRateConverter application has been installed on your computer. See *Software Tool Required* above.
2. Disconnect the cables from both RJ45 connectors (Xanbus connection) on the inverter.
3. Connect the laptop to the inverter via an RS-232 cable.
4. Using GTBaudRateConverter, change the GT Xanbus baud rate:
  - a. Start the GT Baud Rate Converter program.
  - b. If you are not using COM1 on your laptop to connect to the inverter, you will see two error messages indicating that communication could not be established with the inverter. Click **OK** to close each error message, and then select the correct serial port from the drop-down list.
  - c. Select **Convert to 125kbps** or **Convert to 250kbps**, and then click **Convert Baud Rate**.

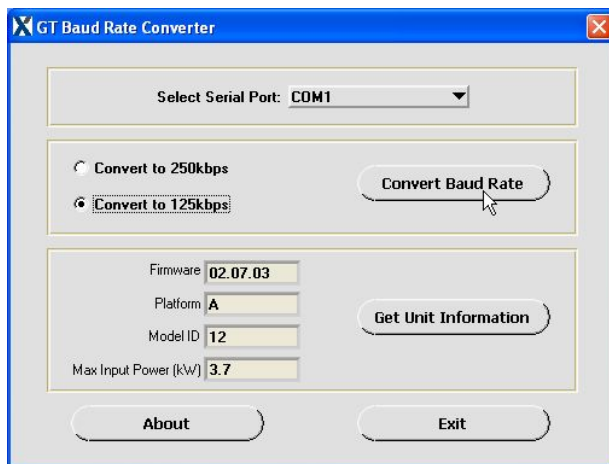


Figure 2: GT Baud Rate Converter

The following dialog appears after the conversion is finished:

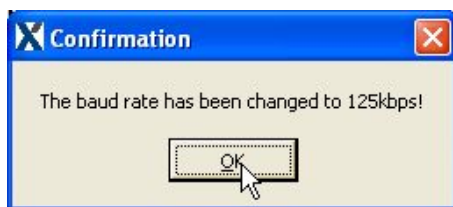


Figure 3: Confirmation Dialog

- d. Click **OK**, and then click **Exit** to close the program.
5. Repeat steps 1 – 4 for all other inverters.
6. Reconnect all Xanbus connections to all the inverters and the Gateway.

7. Using a CANbus network analysis tool, such as theMaretron N2K CAN meter, verify that the network is healthy and that all nodes are communicating (the meter allows you to individually examine each device on the network).
- If the network is not healthy, you will see many bus errors (more than 1 per second).

For an unhealthy network, check the following:

- Make sure the total Xanbus network length specification has not been exceeded.
- Make sure the network has only two terminators installed – one at each far end of the network.
- Make sure there are no long stub connections coming from a Xanbus 3-port T connector (if any are used). Long stub sections cause reflections and are problematic for the network. It is recommended to configure the network in daisy chain fashion for best performance.
- Make sure all the cable sections are correct and not shorted anywhere.

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