

APPLICATION NOTE



TX321/TX320 Firmware **Update Procedure**

Revision: 12/18



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TX321/TX320 Firmware Update Procedure

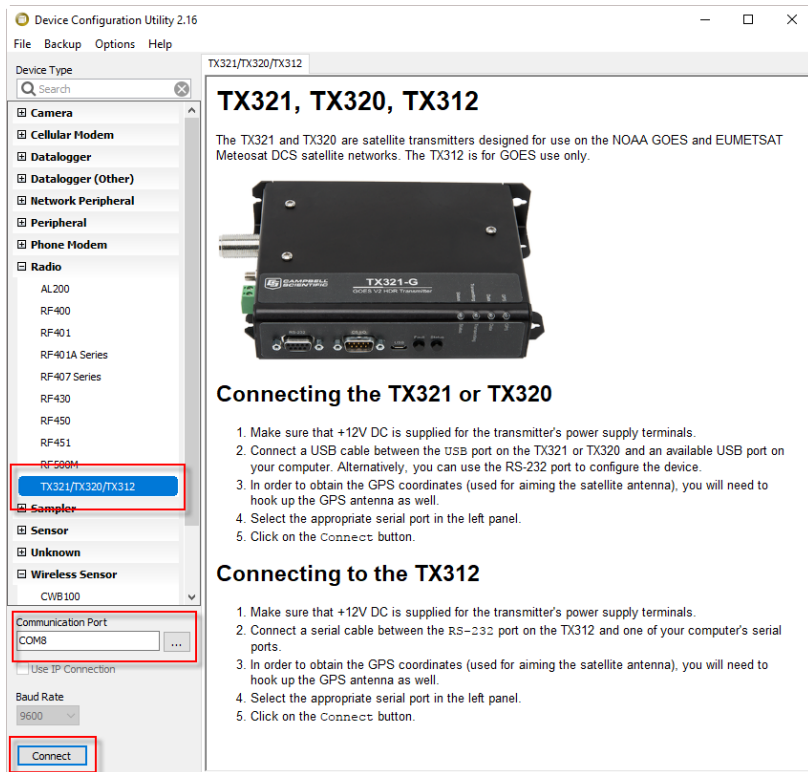
1. Equipment Needed

- Computer with *Device Configuration Utility* installed. The latest version of *Device Configuration Utility* can be downloaded from our website at www.campbellsci.com/downloads/device-configuration-utility.
- RS-232 cable or USB to RS-232 cable
- 12V power supply
- DeviceFirmwareUpdaterPC.exe and the G61_APP_Vxx.xx.hex (TX321) or G5_APP_V8.04 (TX320) firmware file. These can be downloaded from our website at www.campbellsci.com/downloads/tx321-gps-update.

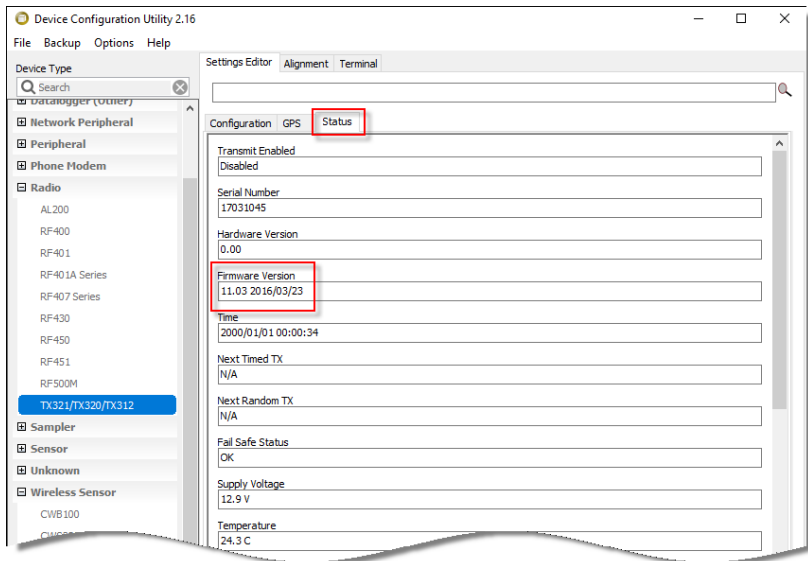
2. Check Current Firmware Version

1. Apply power to the TX321/TX320.
2. Connect the **RS-232** port of the TX321/TX320 to the computer. (Note that the **RS-232** port is the only port that will allow the firmware update.)
3. Open *Device Configuration Utility*.
4. Under **Device Type**, select **TX321/TX320/TX312**.
5. Select the correct **Communication Port**.

6. Click **Connect**.



7. On the **Settings Editor | Status** tab, check the current **Firmware Version**.



8. For the TX321, the firmware will report a version 10 or version 11.

If a version 10 firmware is less than 10.18, update to the latest version 10 firmware (version 10.18 or newer).

WARNING

If you attempt to update from a version 10 firmware to a version 11 firmware, it will clear your calibration parameters. This will require that the unit be sent back to Campbell Scientific for recalibration.

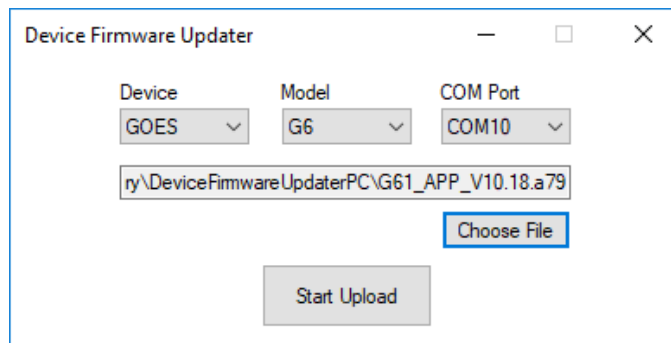
If a version 11 firmware is less than 11.05, update to the latest version 11 firmware (version 11.05 or newer).

For the TX320, version 8 firmware needs to be updated to the latest version 8 firmware (version 8.04 or newer). Firmware prior to version 8 does not need to be updated.

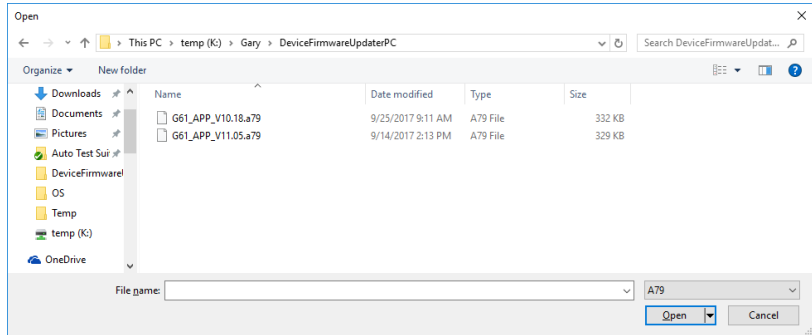
9. Disconnect from the *Device Configuration Utility*.

3. Update Firmware

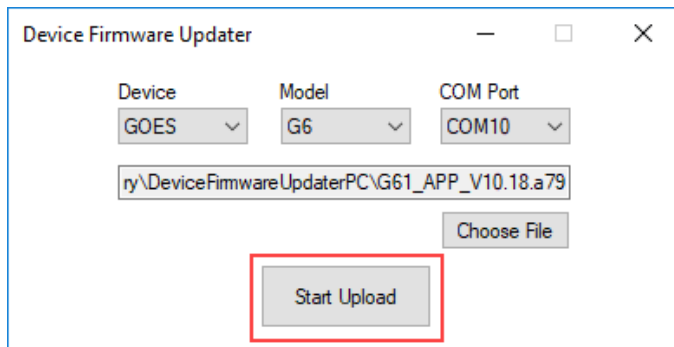
1. Connect the **RS-232** port of the TX321/TX320 to a computer.
2. If attached, unplug cable from datalogger **CS I/O** port.
3. **Remove power** from the TX321/TX320.
4. Locate the DeviceFirmwareUpdaterPC.exe file.
5. Click on the file to run the software.
6. Ensure that the **Device** is set to **GOES**. Select the appropriate **Model** (G6/TX321, G5/TX-320). Select the appropriate **COM Port**. Verify that the RS-232 cable is attached.



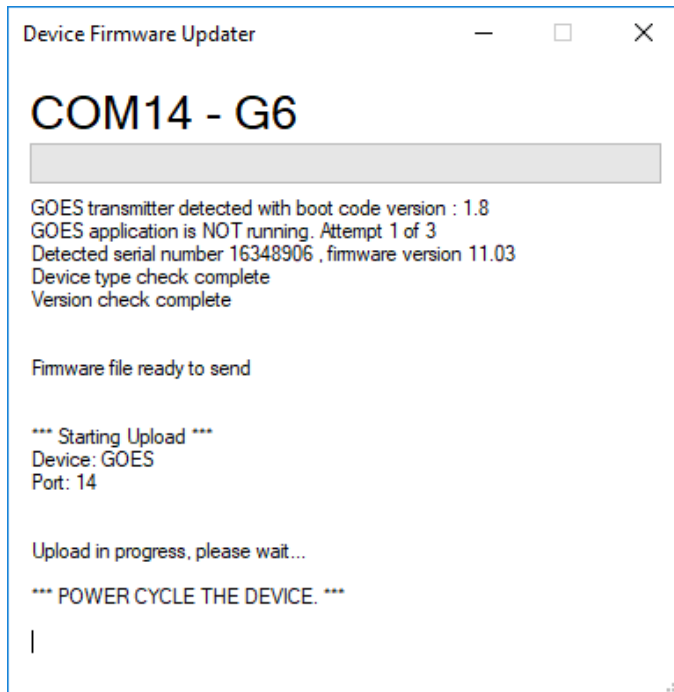
- Click the **Choose File** button, browse to the appropriate firmware version, and click **Open**.



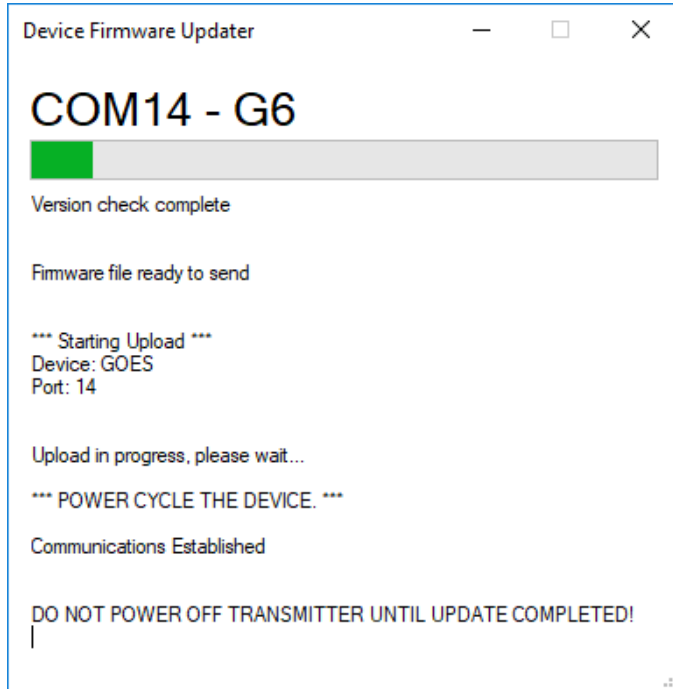
- Click the **Start Upload** button to proceed.



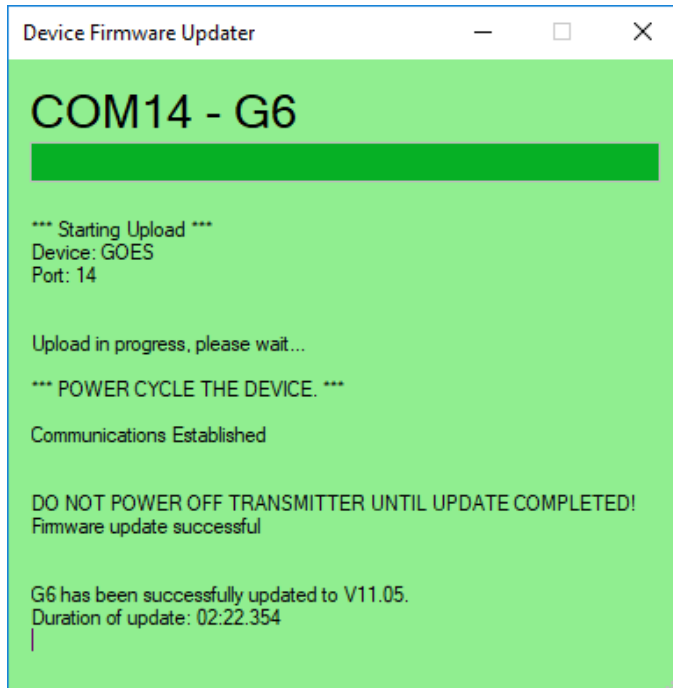
- Once the upload screen appears, follow the instructions displayed in the dialog.



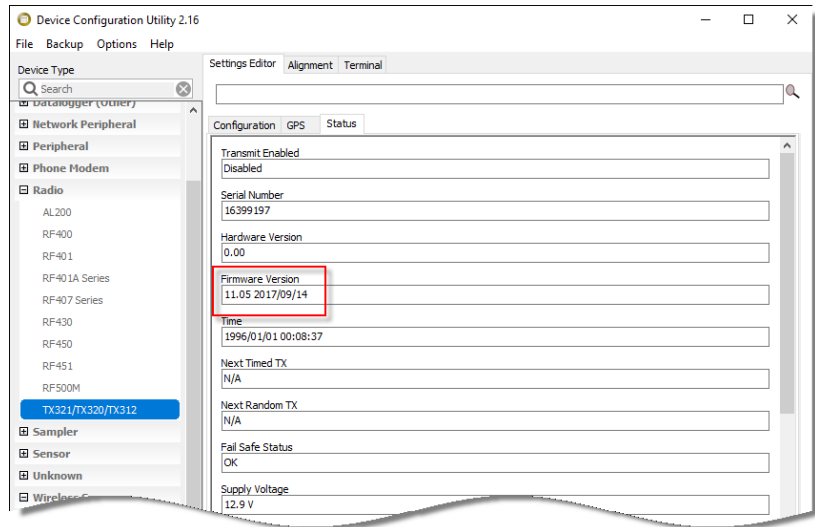
If no error messages are shown (dialog turns red), the green progress bar will begin to move.



When complete, the dialog will turn green.



10. Use the *Device Configuration Utility* to verify the firmware has been updated.



11. If you unplugged the cable from the datalogger CS I/O port in step 2, plug it back in.

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