

IMPORTANT: Follow these instructions first, then use Operating Guide to continue

## TG-7UB Installation Instructions

The Telguard TG-7UB-A (AT&T) and TG-7UB-V (Verizon) can be used to upgrade older 3G and CDMA TG-7 cellular series communicators to the comparable LTE-M product. Many components from the older product will continue to be used.

NOTE: Prior to upgrading an active communicator, ensure that the system is in test mode and a serial number swap has been completed in the Telguard Dealer Portal at telguard.com.

## **Pre-Installation Checklist**

- LTE-M circuit board
- Stick-on Isolation pads (4)
- LTE antenna

- Terminal blocks (use existing if able)
- Phillips screwdriver (not supplied)
- Updated door & serial number labels

## Hardware Upgrade Procedure

- A. Disconnect all power to the Telguard communicator. This includes AC power transformer and battery, or DC panel/TG-PEM connection.
- B. Remove the TG7 series circuit board from chassis by performing the following steps:
  - 1. Pull off terminal blocks from the old circuit board for reuse later.
  - 2. Disconnect the antenna or antenna cable from the connector atop the circuit board. If present, remove and discard the retaining nut and washer from the connector (*Figure 1*).
  - 3. Remove the four (4) screws securing the old circuit board, located near each corner (*Figure 2*). Retain the screws for securing the new circuit board.
  - 4. Remove old circuit board and dispose of responsibly.
- C. Peel off backing from isolation pads and press into place behind each corner of the new circuit board, aligning pad holes with board holes (Figure 3).



Figure 1. Antenna Connector

Figure 2. Circuit Board Screws

## TG-7UB Installation Instructions

(continued from other side)

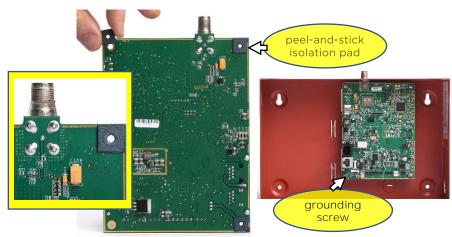


Figure 3. Isolation Pads on Back of Board

Figure 4. Board Installed

- D. Install upgrade circuit board by performing the following steps:
  - 1. Carefully place the board into the metal enclosure. The antenna connector atop the board should not touch the enclosure.
  - 2. Secure the board in place using the screws removed earlier. If there is a grounding screw (colored green), position it in the lower-left corner to indicate a grounding point (Figure 4).
  - To meet updated grounding requirements, do not use a retaining nut or washer on the board's antenna connector.
- E. Install new door labels and Serial Number labels over existing labels to meet code requirements and provide guidance.
- F. Attach new antenna to circuit board connector. If using an antenna cable, attach it to the board connector, then attach new antenna to opposite end. External antennas should be LTE compatible, such as the Telguard EXDL-O, to avoid performance issues.
- G. New LTE-M circuit board has the same layout as the old 3G or CDMA board, so you can simply plug the terminal blocks into the new board as they were in the old board. Restore power connections. Refer to door label for guidance.
- H. Circuit board installation is now complete. The communicator has been upgraded to a newer version. More information can be found in the Installation & Operating Guide available at telguard.com.

**Updated Grounding Requirements**: Circuit board must be isolated from the metal enclosure. Use supplied isolation pads with the new board and do not use a washer or retaining nut on the antenna connector.