Step 1: Before going onsite, you must complete the "Submit for radio update" portion of the form found under the "CDMA Sun Setting" tab, located on the main menu bar within your dealer webpage. This initiates the LTE Firmware download process to the monitor. If you have not completed Step 1, call OmniMetrix Tech Support at 770-318-4112 ext. 2 prior to proceeding with any instructions on this page.

Step 2: Once onsite, observe the unit. The "Activity" & "Modbus" LEDs should be flashing alternately with the "Power" LED or they may all be on simultaneously. If you see the Modbus LED blinking rapidly, and/or the Network LED lit, the LTE firmware has not fully downloaded into the monitor yet.



****DO NOT** change out the radio until the LTE firmware is successfully installed into the monitor. If firmware download has failed (Step 1), call OmniMetrix Tech Support before proceeding with any instructions on this page.

Replacing the radio**

The radio replacement requires the following tools:



- #1 (small) Phillips screwdriver
- 5/16" nut driver or wrench
- The process may require a pair of pliers to remove the antenna connector nut.



The radio kit comes complete with:

- Verizon LTE Radio. <u>Write down the radio IMEI number</u>, (see white arrow in picture below for location) as you'll need this for final setup & test. This number may also be located on the radio packaging.
- Verizon LTE SIM card
- Panel Mount-antenna connector cable (secured to Verizon Radio)
- 2 radio mounting screws



- 1. Turn the OmniMetrix power switch to the "Off" position.
- 2. Disconnect the external antenna's connector cable.
- 3. Disconnect the external data interface cable (9 Pin or 25 Pin or both).
- 4. Remove the 4 corner screws on the front face plate of the OmniMetrix monitor and set them aside for later use.





 The front face plate slides out from the OmniMetrix case along with the main control PCB that supports the CDMA radio card. The main control PCB is aligned on the 4th notch of the case. Remember this when putting the unit back together.



6. Use a 5/16" nut driver or wrench to remove the panel mount-antenna connector from the front face plate. This may require a pair of pliers to hold the backside of the antenna connector. **Discard the old nut and star washer**.





7. Turn the main control PCB assembly over so the CDMA Radio Card is visible. There will be two screws, in opposite corners, that must be removed. Leave the white standoffs in place on the main control PCB:



- 8. Once the screws have been removed, pull the radio card straight up & away from the main control PCB and **discard the CDMA radio card, old antenna connector assembly and radio card screws**.
- 9. Note the orientation of the white SIM card on the new Verizon LTE radio (notch). Carefully remove the SIM card and place it aside.



- 10. Gently insert the new Verizon LTE radio (pin contacts) into the same connector sockets the CDMA radio came out of. Look in between the radio board and main control board to confirm the three sets of radio pin contacts are all inserted into the existing sockets on the main controller board (All connector pins must be correctly inserted, or the LTE radio will fail to operate).
- 11. If the Verizon radio card has not been placed correctly, the screw holes will not line up. If this occurs, remove the radio card by gently pulling it straight up from the PCB. Check for bent pins on the bottom of the LTE radio card, if they are bent:
- Gently bend the pins back into their vertical orientation
- Place the LTE radio card back into the correct position on the main control PCB
- 12. If the Verizon LTE card has been installed correctly, the screw holes will line up with the existing standoffs. Take the two, new radio screws and secure them into place.



- 13. Place the Verizon LTE SIM card into its holder, make sure to align the SIM card correctly (notch).
- 14. Loosen and remove the nut and star washer from the **new, panel mount-antenna connector**.





- 15. Turn the PCB over and route the antenna connector wire through the notch in the PCB by the SIM card of the Verizon LTE radio.
- 16. Route the new, panel mount- antenna connector (**without the nut and star washer**) through the antenna connector hole on the front face plate of the OmniMetrix monitor.
- 17. Place the star washer on the antenna connector prior to reinstalling the nut. Tighten the nut to the front panel of the OmniMetrix monitor. Nut should be hand tightened until it no longer spins then a ¼ to ½ turn more should be applied with the nut driver or wrench.



- 18. Slide the main control PCB/Front panel assembly back into the OmniMetrix case (remember to align the PCB with the 4th slot).
- 19. Reinsert the 4 corner screws.
- 20. Reconnect the data interface cable(s).
- 21. Reconnect the external cellular antenna, making it thumb tight
- 22. Switch the unit on.
- 23. Call into OmniMetrix Tech Support, 770-209-0012 Ext. 2, and provide the OmniMetrix Unit ID number and the IMEI Number of the new radio.