METER
ENVIRONMENT

UPDATING METER DIGITAL SENSORS WITH ZENTRA UTILITY

An update to the firmware running METER digital sensors is occasionally necessary to implement improvements or to fix bugs. Please follow the instructions below to update your METER digital sensors using an Em60, ZL6 data logger, or ZSC bluetooth sensor interface. Please contact support.environment@metergroup.com or call 509-332-5600 before performing any updates to sensors.

UPDATING YOUR SENSORS

To perform the update you will require:

- A laptop with ZENTRA Utility or mobile device (iOS or Android) with the ZENTRA Utility Mobile App

- Micro USB cable (with data transfer capabilities like the white ZL6 cable) if using a laptop

- The sensor firmware image file saved on your computer or mobile device

- An EM60 or ZL6 data logger or ZSC bluetooth sensor interface

- Pigtail to stereo adapters (If your sensors are bare lead connections)

    - **PRECAUTION: Do NOT let the wires short to each other (cross) if you are using an alligator clip type adapter to connect pigtail sensors to your METER logger**

PREPARATION:

Contact support.environment@metergroup.com to confirm the correct firmware image file for your sensor. The latest TEROS 11/12, or ATMOS 41 sensor firmware versions should automatically save to your laptop or mobile device if you open the ZENTRA Utility or ZENTRA Utility Mobile app when your device has an internet connection. However, you must contact support.environment@metergroup.com for firmware updates to all other sensors.

UPDATING USING THE ZENTRA UTILITY APP ON A LAPTOP

1. Launch ZENTRA Utility and connect your laptop to the EM60 or ZL6 data logger using the micro USB cable.

2. Make sure that the sensor(s) that you want to update are plugged into the data logger.

   NOTE: The FW update will update the FW of every sensor of that type connected to the data logger. It will ignore any sensors that are not the correct type.

3. Scan the sensor to make sure that it is functioning. NOTE: A sensor with an SDI-12 address other than 0 will not respond. This is normal behavior. The factory default is 0 for METER digital sensors.

4. The updater will only work if the sensor address is 0. Change the SDI-12 address to 0 temporarily to update the sensor using the Digital Sensor Terminal in ZENTRA Utility.

   PRECAUTION: Be sure to write down the SDI-12 address for each sensor so that you can restore them after the update.

5. Go to Help, and select Update sensor Firmware.

6. Click Choose Firmware Image and direct the file guide to the updater image supplied by METER Support in the directory where you placed it.

7. Press Update Now and the FW updater will take care of the rest.

8. The update should take up to a few minutes to complete. You should receive some progress reports during the update.

9. When the update is finished, you should see a box declaring "Sensor FOTA Success" Click OK, and the process is complete.

NOTE: ZL6 FW versions 2.07 or less have a bug that will declare success in FW updates yet may in fact be unsuccessful. You can find the FW version of your logger below the logger model. See Fig 1. Always double check the FW version of your sensor after the update.. The FW version is listed beneath the sensor type. If your FW update failed, follow these instructions to successfully update your sensor FW.
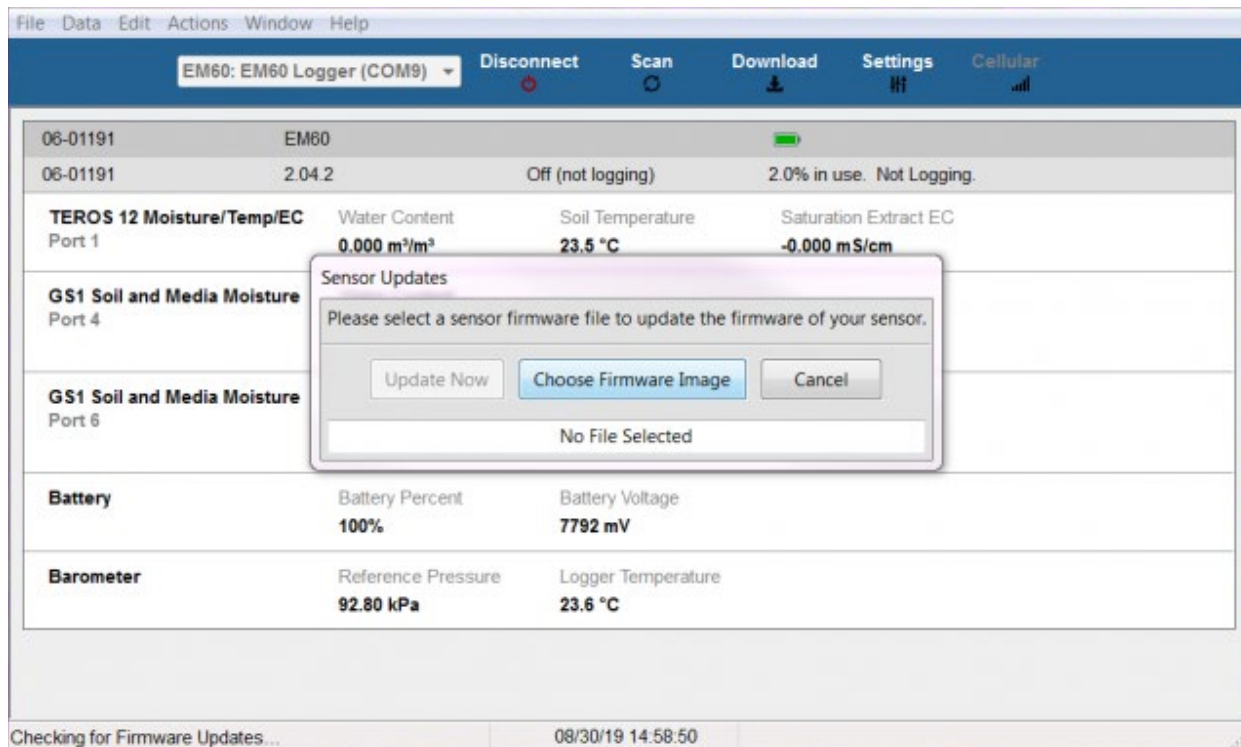
Fig 1. Choose FW image and direct ZENTRA Utility to where your FW image file is saved

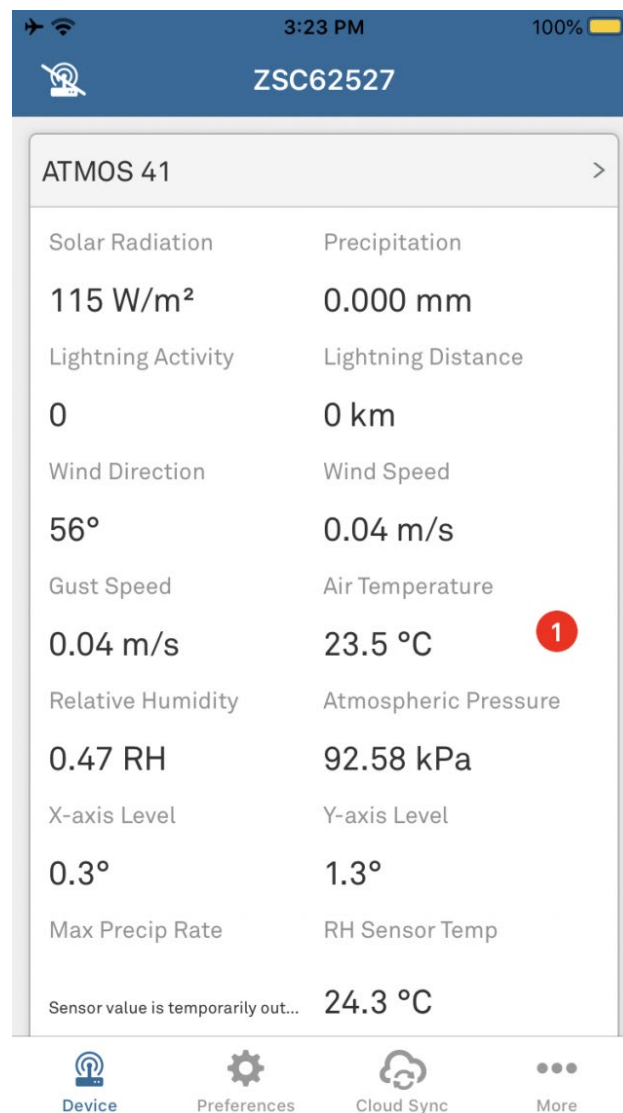## UPDATING USING THE ZENTRA UTILITY MOBILE APP ON A MOBILE DEVICE

1. Launch the ZENTRA Utility Mobile app on your iOS or Android handheld device.

2. Press the "Test" button on the ZL6 logger or the white button on the ZSC to establish bluetooth connection with your mobile device. Note that the Em60 does not support bluetooth communication, so the directions above for updating with a laptop must be used with the Em60.

3. Make sure that the sensor(s) you want to update are plugged into the ZL6 or ZSC.

   NOTE: The FW update will update the FW of every sensor of that type connected to the ZL6. It will ignore any sensors that are not the correct type.

4. Scan the sensor to make sure that it is functioning.

   NOTE: A sensor with an SDI-12 address other than 0 will not respond. This is normal behavior. The factory default is 0 for METER digital sensors.

5. The updater will only work if the sensor address is 0. Please note that the SDI-12 address cannot be changed through ZENTRA Utility Mobile connected to a ZL6. Use a ZSC to easily change the addressPrecaution: be sure to write down the SDI-12 address for each sensor so that you can restore them after the update.

6. ZENTRA Utility Mobile will automatically recognize if the sensor is in need of a firmware update and show a red icon next to the sensor data.

7. Click the red icon, read the cautions, and then click "Start Update".

8. The update should take up to a few minutes to complete.

9. You should see an indication when the update is finished.

NOTE: ZL6 FW versions 2.07 or less have a bug that will declare success in FW updates yet may in fact be unsuccessful. See Fig 1. Always double check the FW version of your sensor after the update. You can check the FW version of your sensor by going to Settings and select Sensor Configuration. The FW version is listed beneath the sensor type. If your FW update failed, <u>follow these instructions</u> to successfully update your sensor FW. You will need to use ZENTRA Utility on a laptop for those instructions.

NEED PROCHECK INSTRUCTIONS?

Instructions for updating METER sensors using the ProCheck are <u>located here</u>.

QUESTIONS?

<u>Talk with a support expert</u>—Our scientists have decades of experience helping researchers measure the soil-plant-atmosphere continuum.

REQUEST A QUOTE   CONTACT US