

# Em50<sup>®</sup>G Data Logger

## Quick Start Guide

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### About the Em50G

Thank you for purchasing an Em50G data logger. The Em50G is a data collection device collects and stores data from up to five METER sensors. Collected data are sent to the METER Data Service using cellular/mobile communication up to six times a day. You can access your data from the METER Data Service at any time with DataTrac 3 or the Em50G webviewer.

The Em50G is configured using ECH20<sup>®</sup> Utility or DataTrac 3 software. DataTrac 3 is the preferred software package for the Em50G and will be the primary reference throughout this quick start guide. To utilize ECH20 Utility or the Em50G webviewer, please consult the Em50G user manual.

### Installing the software

Before taking the Em50G into the field, install DataTrac 3 on your designated field computer.

1. Insert your DataTrac 3 installation USB into your computer or visit [metergroup.com/em50-support](http://metergroup.com/em50-support) to install DataTrac 3 on your computer.
2. Click “Run” to start the installer and follow the onscreen instructions.

**NOTE:** The 1-year service plan activates when METER ships the instrument and not at time of installation.



# Installing the Em50G in the field.

1. Before installing your sensors and loggers, check the quality of the cellular communication between the Em50G and local cellular towers at the location you would like to monitor.
  - a. Insert the included 5AA batteries into the Em50G and attach the Em50G antenna.
  - b. Open DataTrac 3 on your field computer and connect the Em50G to your computer using the included USB cable.
  - c. In the “connect via” dropdown menu, select the COM port containing “Decagon UCA.”
  - d. Click the “Connect” button in DataTrac 3.
  - e. Click “No” when prompted to configure the logger.
  - f. The DataTrac 3 toolbar, choose “Connection”, then “Device Tools”, then “Communication Test.”
  - g. Click the “Test” button. The communication test takes about 30 s, so please be patient. If cellular coverage is low, try moving (even just a few meters) to a new location and repeating the test until you have at least one star of communication.
2. Install your sensors and attach the Em50G in an upright position to a firm post or PVC pipe, using the included zip ties or similar fasteners.
3. Install the data logger in a location that will ensure that the solar panel receives the maximum amount of sunlight. In the northern hemisphere, this will typically mean that the data logger will face the south. In the southern hemisphere, this will typically mean that the data logger will face the north.”

**NOTE: Em50/Em50G solar data loggers come with batteries preinstalled. Remove battery pull-tab to activate batteries. Use only nickel-metal hydride (NiMH) batteries with the solar Em50/Em50G.**

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# Em50G Logger Configuration

1. Take the brightly colored card containing your Device ID and put it in a safe place. You will need this number and password to download your data from the METER Data Service.
2. If DataTrac 3 is not launched, launch DataTrac 3.
3. Connect the Em50G to your computer using the included USB cable.
4. In the “Connect via” dropdown menu, select the COM port containing “Decagon UCA”
5. Click the “Connect” button in DataTrac 3.
6. If not prompted to configure logger, select configure button.
7. Click “sensors and measurements” and pick your measurement interval from the dropdown menu.



## Downloading Data



1. If you are using a different computer to view your Em50G data, install DataTrac 3 in the different computer as instructed above.
2. Launch DataTrac 3.
3. Click “Setup”, then “User Configurations”. Enter your e-mail and a user password that you can remember. The information in this field is used for tracking our server use and for nothing else.
4. Click “Setup”, then “Create New”, then “Em50G subscription”.
5. Enter the Device ID and the Password found on the bright orange card that came with your Em50G. Both the ID and password are case sensitive. Click “Subscribe”.
6. The next time you would like to see new data, you can launch DataTrac 3, click on the device in the device tree, and select the “Download” button.





# Test Buttons

The Em50G has a TEST button and two indicator LEDs above the batteries for basic functionality testing.

OK   
ERROR  • After the TEST button is pushed, both the ERROR (red) and OK (green) lights will slowly blink on and off indicating that the testing is in progress.

OK   
ERROR  • When the Em50G is sending data to METER's server, the OK (green) light will blink rapidly.  
• At the end of the testing, the OK (green) light will remain lit for approximately 20 s if everything is working properly.

OK   
ERROR  • At the end of the testing, the ERROR (red) light will remain lit, a communication error is occurring. Perform a telemetry test to attempt to diagnose the problem.

If you have any questions about configuring your Em50G or downloading data from the METER server, please contact METER at 509-332-5600 or [info@metergroup.com](mailto:info@metergroup.com).



**METER**

2365 NE Hopkins Court  
Pullman, Washington 99163  
T: +1.509.332.5600  
[info@metergroup.com](mailto:info@metergroup.com)