

## About the Em50G

Thank you for purchasing an Em50G data logger. The Em50G is a data collection device that will allow you to collect and store data from up to five Decagon sensors. Collected data are sent to the Decagon Data Service using cellular/mobile communication up to six times a day. You can access your data from the Decagon Data Service at any time with DataTrac 3 or Em50G Downloader. The Em50G is configured using ECH2O Utility or DataTrac 3. DataTrac 3 is the preferred software package for the Em50G and will be the primary reference throughout this quickstart guide. To utilize ECH2O Utility or the Em50G Downloader, please consult the Em50G user manual.

If you have any questions about configuring your Em50G or downloading data from the Decagon server, please contact Decagon at: 1-800-755-2751 or [support@decagon.com](mailto:support@decagon.com).



2365 NE Hopkins Court  
Pullman, Washington 99163  
tel: 509-332-2756  
[support@decagon.com](mailto:support@decagon.com)

# Em50G QuickStart Guide

---

## Installing the software

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

1. Insert your Datatrak 3 installation cd into your computer or visit [www.decagon.com/datatrak3](http://www.decagon.com/datatrak3) to install Datatrak 3 on your computer.
2. Click "Run" to run the installer and follow the onscreen instructions.

## 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. In DataTrac 3's toolbar, choose "Connection", then "Device Tools", then "Communication Test".
  - g. Click the "Test" button. The communication test takes about 30 seconds 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. Configure your logger's setting using the steps on the next page.

## 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 Decagon 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.
8. Click on each port and select the sensor type plugged into each port.
9. To turn the cellular network of the Em50G on or off, click "GSM". The cellular network is active when "upload data to ECH2OData.com" box is checked and is off when the box is not checked. The Em50G is uploading data to the Decagon Data Service ("on") by default.
10. Choose up to six upload times. Default upload times are: 6-7 a.m., 10-11 a.m., 1-2 p.m., 4-5 p.m. To conserve battery power, choose fewer upload times.
11. Click "Apply".

## 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    |    | • When you push the "TEST" button on the logger, both the "ERROR" (red) and "OK" (green) lights will slowly blink on and off indicating that the testing is in progress.       |
| ERROR |   |  |
| OK    |  | • When the Em50G is sending data to Decagon's server, the "OK" (green) light will blink rapidly.   |
| ERROR |  | • At the end of the testing, if everything is working properly, the "OK" (green) light will remain lit for approximately 20 seconds.   |
| OK    |  |  |
| ERROR |  | • If you have pressed the "TEST" button and the bottom red light remains lit, a communication error is occurring. Perform a telemetry test to attempt to diagnose the problem. |

