DATA**GRABBER**®

INSTRUCTION MANUAL

DATA
GRABBER®
with Bluetooth®

DATA
GRABBER®

RAPIDRH L6

Fast, Accurate Moisture Test for Concrete Floors

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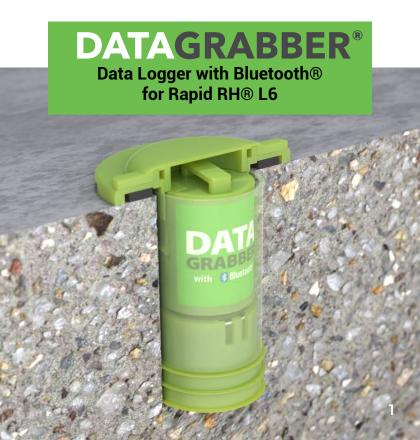
Congratulations!

Your purchase of the DataGrabber® with Bluetooth® or the DataGrabber® gives you the ability to automate the collection of in-situ relative humidity (RH) test data. Because they integrate with the Rapid RH® L6 system, the use of either DataGrabber device can enhance your collection and documentation of Rapid RH L6 data.

Your DataGrabber device automates the data collection process by connecting with a Rapid RH L6 Smart Sensor and then allowing a microchip built into the sensor to store time and date-stamped RH and temperature readings on a periodic basis—for days, weeks, or even months at a time while you are away from the job site.

Both the DataGrabber with Bluetooth and the DataGrabber perform the same automated data gathering tasks. They differ in how they communicate to your smartphone or other mobile device. The DataGrabber with Bluetooth features a built-in wireless connection to your smart device. The non-wireless version of the DataGrabber requires the use of the Bluetooth-enabled Rapid RH Total Reader®.

DATAGRABBER®
Data Logger with Bluetooth®
for Rapid RH® L6

DATAGRABBER®
Data Logger for Rapid RH® L6

Your DataGrabber device is designed to work in conjunction with the DataMaster L6 app (available to download for free in the App Store and on Google play). With this app, you can configure time intervals for collecting RH test data, keep a running clock of acclimation time, download the time and date-stamped readings to your smart device, and generate and send reports.

Your DataGrabber device can be used to collect and store up to 512 time and date-stamped RH and temperature readings on an L6 sensor. The data you collect can help you gain a better understanding of the drying process as well as the dynamics that may be affecting the concrete drying time. You can also analyze the data for any trends using the DataMaster L6 app.

INSTALLATION

The installation of your DataGrabber device is fast and easy. Simply insert the device into the green sleeve of the L6 Smart Sensor (previously installed in concrete.) Notice that your DataGrabber has nine small protruding metal "connectors" at the base. Be sure to orient the base downward when you insert the DataGrabber into the L6 sleeve. This is required to obtain a connection with the L6 Smart Sensor.

These pictures show what the DataGrabber with Bluetooth and the DataGrabber look like when installed correctly.

DataGrabber with Bluetooth fully and correctly inserted into L6 sensor.

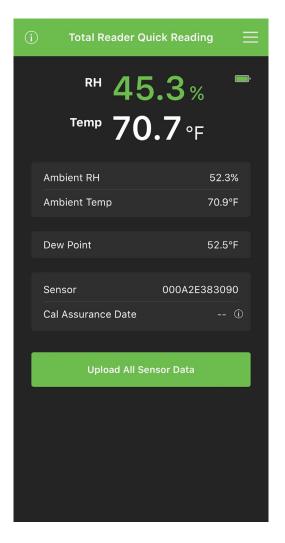**DataGrabber fully and correctly inserted into L6 sensor.**

DATAMASTER L6 APP: GETTING STARTED

It is recommended that you set up an account at **www.F2170reports.com** for use with the DataMaster L6 app. At this site, you can choose a username and password. This also becomes the username and password that you use for logging in to the DataMaster L6 app.

Next, download the free DataMaster L6 app to your smart device. This app is available online in both iOS and Android versions at the Apple App Store and Google Play.

Before using the DataMaster L6 app, make sure you have Bluetooth enabled on your mobile device. When you open the app for the first time, a pop-up window will open giving you the option to watch a video tutorial. It's highly encouraged to watch this tutorial to ensure proper usage, but if not, you can also choose to skip the tutorial, which takes you to the Total Reader Quick Reading screen shown below:
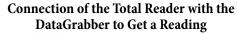

The DataMaster L6 app gives you many options for viewing, saving, and attaching your data to reports. More information about using the app is available at **https://www.wagnermeters.com/support/wagner-pdf-downloads/**.

CONNECTION

After installing your DataGrabber device and downloading the DataMaster app, your next step is to connect the DataGrabber with your mobile device so that you can configure it for the automated collection of time and date-stamped data.

As described already, for the DataGrabber with Bluetooth, a wireless connection is obtained when it is within Bluetooth range of your mobile device. For the DataGrabber (without Bluetooth), use the Rapid RH Total Reader with the DataGrabber to connect wirelessly to your mobile device.

Connection of the Total Reader with the DataGrabber to Get a Reading

Next, with the DataMaster L6 app open on your mobile device, click on the Menu icon (three horizontal bars) located in the upper right-hand corner of the screen. Then choose Manage Devices to go to the Devices screen.

DataGrabber with Bluetooth

A pop-up window will appear on the RH Reading screen if detecting an installed DataGrabber with Bluetooth device for the first time. In addition, if you are in proximity of any DataGrabber with Bluetooth units installed in L6 sensors, on the Devices screen the unit with the greatest signal strength will appear as the first unit at the top, followed by other DataGrabber units within Bluetooth range. You can begin to configure your DataGrabber units (see the Configuration section).
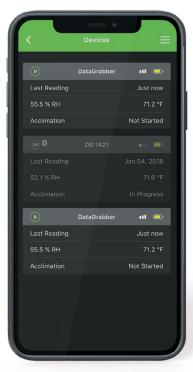
DataGrabber (without Bluetooth)

Use the Total Reader with the DataGrabber to connect to the DataMaster L6 app on your mobile device. A pop-up window will appear on the RH Reading screen if detecting an installed DataGrabber device for the first time. IMPORTANT: You must connect the Total Reader with the DataGrabber TWICE for it to start working. The first time initializes the DataGrabber device, and the second time verifies that the device is taking readings. If you transfer the DataGrabber to a new L6 Smart Sensor, you will need to repeat this process.
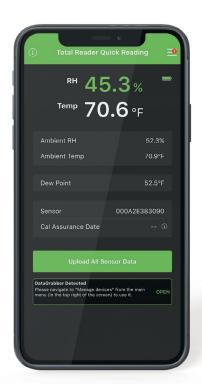
Whenever the Total Reader is properly connected to the DataGrabber, it will appear on the app's Devices screen, as named, along with any DataGrabber with Bluetooth devices. You can now select your DataGrabber device and configure its settings as needed.

NOTE: On the Devices screen, you can easily identify the type of device that is connected to your L6 sensor by the icon to the left of the Device name:

(DB) ⁸ DataGrabber with Bluetooth

(D) DataGrabber

(TR) Total Reader

Example of reading results on DataMaster L6 app

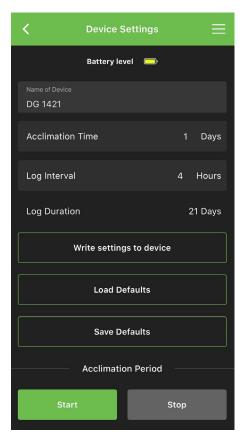*Pop-up window will appear if using for the first time*

CONFIGURATION

Each DataGrabber device can be configured for Device Name, Acclimation Time, and Log Interval.

At the Devices screen, select the three bars in the upper right hand corner of the screen and select "Manage Devices" to navigate to the "Devices" screen.

The DataGrabber is available for configuration if the Settings button is green. If the Settings button is grey, you may need to troubleshoot your device (see the Troubleshooting section on pg 17).

Next, click the green Settings button. In approximately 20 seconds or less, the Device Settings screen for that DataGrabber will appear; as shown below.

Device Name
The device name can be up to 12 characters long.

NOTE: There will be a default name present in the Device Name field, but you will likely want to rename it.

Acclimation Time

The amount of time elapsed (in days) before the DataGrabber will automatically capture (grab) a measurement and store it in the L6 Smart Sensor's memory as the acclimated time measurement of both RH and temperature. For instance, setting an acclimation time of one day and then starting, the DataGrabber will wait 24 hours and "grab" a measurement for storage in the L6 Smart Sensor's memory. In most cases, it is highly recommended to use one day as the acclimation time, given that 24 hours is the minimum equilibration time specified by the ASTM F2170 standard for getting official, documentable RH readings.

NOTE: Your DataGrabber device is "reusable" and not limited to use with only one L6 sensor. To ensure that your device properly utilizes the settings you configured, including the acclimation time, be aware of the following when transferring a DataGrabber device to another L6 sensor:

- For the DataGrabber, it takes up to one minute to turn off after removal from an L6 sensor. If inserted into a new sensor within that minute, the DataGrabber will not detect the move until the next reading is taken.

- For the DataGrabber with Bluetooth, the process of turning off the device after removal occurs much quicker (about 5 seconds).

Log Interval

In addition to the reading captured (grabbed) when the Acclimation Time has elapsed (see above), an L6 sensor, through the DataGrabber with Bluetooth, will begin to capture readings at a certain interval, defined as the Log (data logging) Interval. This data logging of RH and temperature readings begins as soon as the DataGrabber with Bluetooth is inserted into the sensor, and a new set of readings is logged every time the Log Interval is met. The default and minimum Log Interval is 1 hour.

Log Duration

A calculation of the total number of days that periodic time and date-stamped readings will be taken based on the set log interval and the L6 Smart Sensor's maximum memory storage of 512 data points. Once this limit is reached, the first stored reading will be overwritten.

Write Settings to Device

Whenever you change the configuration of the DataGrabber, you must click the Write Settings to Device button in order to save the settings.

Default Settings

If you wish to use the acclimation time and log interval settings as the default settings for one or more additional DataGrabbers, click the Save Defaults button. This saves the settings displayed as your default settings. Then select another DataGrabber and go to the Settings screen. Click the Load Defaults button. The default settings will now be displayed for this device. Be sure to also click the Write Settings to Device button to save the default settings to this DataGrabber.

Start and Stop

After you have saved the desired settings and are ready to begin the acclimation period for your RH testing, click the Start button to signal to the DataGrabber to begin the acclimation time.

NOTE: The clock in the DataGrabber will automatically synchronize to the clock on your mobile device.

UPLOADING/STORING SENSOR DATA

After you have configured your DataGrabber device to collect RH test data for you automatically, you can return to the job site later to upload and store your data on your mobile device.

Uploading data

Select your DataGrabber device on the Devices screen of the DataMaster L6 app, then click "Save to Map" to upload the L6 sensor data to your mobile device and display the entire list of time and date-stamped RH and temperature data.

Storing readings to a specific map location

At the screen displaying the L6 sensor data, you also have the option to "Store Readings." This stores the readings to the specific map location, assuming the L6 Smart Sensor has been included on the job map. If no job map has been created or the sensor has not yet been added to the map, you can create the map and add the sensor to the job map if desired.
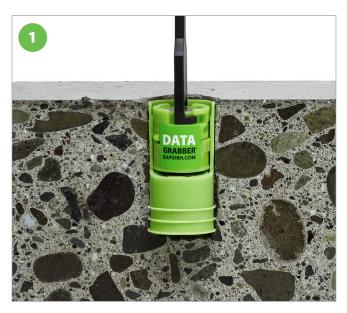
REMOVAL

To remove the DataGrabber or DataGrabber with Bluetooth from the L6 Smart Sensor sleeve, use the included removal tool as shown to carefully extract your device without damaging it.
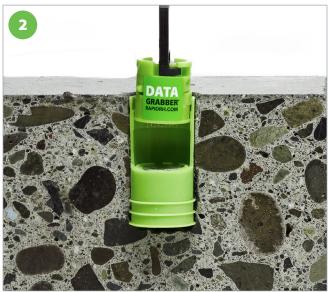
Removal of DataGrabber with Bluetooth

Removal of DataGrabber without Bluetooth

BATTERY

DataGrabber with Bluetooth
Removing and Replacing the Battery

1. Carefully remove the screws near the top with a small Phillips head screwdriver.

2. Tip the DataGrabber with Bluetooth upside down and tap the bottom of the unit carefully to dislodge the battery into your palm.

3. Place the battery (replaceable CR 1/3N) within the well positive side up. (Note: the battery text should be visible.)

4. Insert the battery until it stops. Be careful to avoid using excessive force.

5. Replace the battery compartment cover and carefully re-install the two screws using a small Phillips head screw driver.

DataGrabber
Removing and Replacing the Battery

1. Carefully pry open the battery compartment cover with a small flat head screwdriver or similar device.

2. Use a paper clip or similar implement to push through one of the holes on the back to coax the battery out.

3. Place the battery (Replaceable CR1025) within the well positive side up (the text should be readable). Insert the battery until it stops. Be careful to avoid using excessive force.

4. Replace the battery compartment cover by guiding the arms of the cover inside the slot and pushing until the cover snaps into place.

TROUBLESHOOTING

If your DataGrabber device does not appear when viewing the Devices screen of the DataMaster L6 app:

- For the DataGrabber with Bluetooth: check the connection between the device and the L6 sensor and reseat the DataGrabber device within the sensor

- For the DataGrabber (without Bluetooth): check the connection between the device and the Total Reader. If the Total Reader displays an "Er" message, then reconnect it with the DataGrabber until it displays RH and temperature data. If the Total Reader displays data but the app shows "TR" and not "DG" for the device type, then the DataGrabber battery may be the problem.

- Ensure that the battery is seated properly or replace the battery as needed

PRODUCT SPECIFICATIONS

DataGrabber with Bluetooth

- (Replaceable CR 1/3N) Battery Life: 1.5 plus years [although this will vary depending on usage]

- Storage: 512 data points

- Dimensions: 1" (25.4 mm) Height 0.71" (18.12 mm) Diameter

- Net Weight: 0.19 oz (5.7g)

DataGrabber

- (Replaceable CR1025) Battery Life: 6.5 plus years [although this will vary depending on usage]

- Storage: 512 data points

- Dimensions: 0.79" (20.2mm) Height 0.71" (18.12mm) Diameter

- Net Weight: 0.12 oz (3.3g)

**For more information
on relative humidity testing
and to order online go to**

www.RapidRH.com

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The RAPID RH® L6 DataGrabber is registered
under U.S. Patent 9032791