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Rain Collector Sensor

Product Number: ENRNCOL



Overview

One of the most important factors in weather studies is studying the amount or the rate of rainfall. Designed according to the guidelines of the World Meteorological Organization, the Rain Collector sensor features an exceptionally accurate self-emptying tipping-bucket design. The Rain Collector sensor collects data on both daily and accumulated rainfall.

The Rain Collector sensor can be connected to all types of einstein™ data loggers. It can be used for various experiments in Environmental Science.

Typical experiments



Environmental
science

- Average rainfall
- Daily & annual rainfall

How it works

Rain enters the collection cone and collects in one chamber of the tipping bucket. The bucket tips when it has collected 2 mm of water. As the bucket tips, an internal switch closes, causing the rain to begin draining into the second tipping bucket and sending a pulse to your einstein™ device which calculates the rainfall according to the number of pulses it receives.

Sensor specification

Range:	0 – 999.8 mm
Accuracy:	± 0.2 mm
Resolution (12-bit):	0.02 mm
Data Logger Input Type	Digital

Note: Sensor cable is sold separately

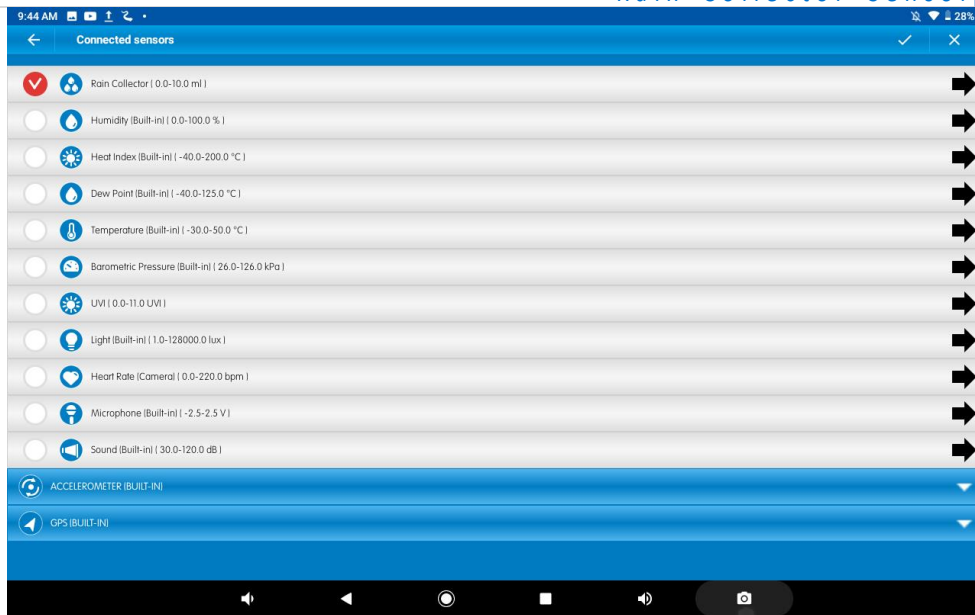
Calibration

The Rain Collector sensor requires no calibration.

Data logging and analysis

Android

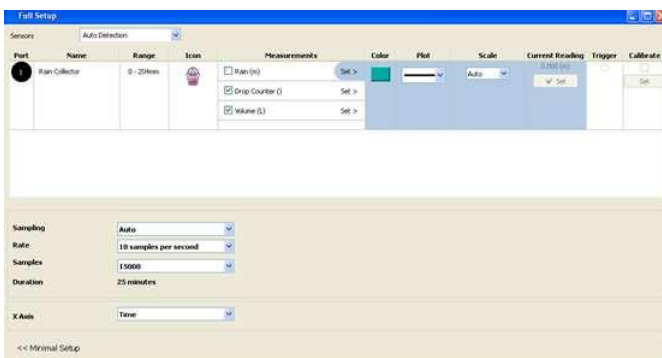
1. Take your einstein™ Tablet OR pair your einstein™ LabMate with your Android or iOS tablet via Bluetooth
2. Insert the sensor cable into one of the sensor ports
3. Launch MiLABEx then tap LAB start an Experiment
4. MiLABEx detects the sensor automatically.
5. To ensure it is selected



6. Go to Sensors and make sure it is checked.
7. Tap V to return to LAB
8. You are ready to start an Experiment

Desktop

1. Pair your einstein™ LabMate with your PC, MAC, or Linux machine via Bluetooth, or connect it via the USB cable (found in the einstein™ LabMate box)
2. Insert the sensor cable into one of the sensor ports
3. Launch MiLABEx and click LAB start An Experiment
4. Click on Full Set up in the Current Setup Summary Box
5. Scroll down to the box marked "Empty" and select Rain Collector from the dropdown list
6. Click Full Setup, located at the bottom of the Current Setup Summary window to program the data logger's sample rate, number of samples, units of measurement, and other options



7. Click the Run button on the main toolbar of the Launcher View to start logging

Experiment set up

This Rain collector sensor is equipped with:

- A collection cone with two tipping buckets
- The Rain collector sensor

Technical support

For technical support, you can contact the Fourier Education's technical support

team at: Web: www.einsteinworld.com/support

Email: support@fourieredu.com

Copyright and Warranty

All standard Fourier Systems sensors carry a one (1) year warranty, which states that for a period of twelve months after the date of delivery to you, it will be substantially free from significant defects in materials and workmanship.

This warranty does not cover breakage of the product caused by misuse or abuse.

This warranty does not cover Fourier Systems consumables such as electrodes, batteries, EKG stickers, cuvettes and storage solutions or buffers.

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