

# EM5B Data Logger

The Em5b is a low cost, limited use five-channel mini-logger. It powers and reads the EC-5, GS1, 10HS, EC-10, EC-20, ECT and RT-1 temperature, as well as the ECRN-50 rain gauge.

Designed for use over the growing season, the Em5b runs for 5-6 months on 4 AAA-size alkaline batteries and has 46 kB of Flash Data memory (138 days at 1 scan/hour).

The Em5b comes with ECH2O Utility software for setting up and downloading data.



## Advantages:

- Cost. The Em5b allows you to add inexpensive peripheral sites to a study.
- Perfect for a season's worth of basic soil moisture data.

## Limitations:

- Limited weatherproofing. Needs to be protected from the elements.
- Not designed to be accessed on a weekly basis. Port 1 must be unplugged before downloading data; case closures can be cumbersome.
- Only reads analog sensors (listed above).



# EM5B Data Logger

## Specifications

Input channels:	5 channels for analog Decagon sensors
Data Storage:	46 KB (138 days @ 1 scan/hour)
Sensor Types:	EC-5, GS1, 10HS, EC-10, EC-20, ECT and RT-1 temperature, ECRN-50 precipitation
Operating Environment:	-5° to 45°C, up to 100% RH
Power Requirements:	4 AAA alkaline batteries (typically good for several months)
Case Dimensions:	8.7 cm x 6.2 cm x 3.5 cm
Case Material:	Impact-resistant IP52, NEMA 3R
Interface Cable:	Serial or USB (cable included)
Software Interface:	ECH <sub>2</sub> O Utility, ECH <sub>2</sub> O Utility Mobile
Warranty:	One year, parts and labor

Data Logger	Ports	Memory	Batt. Life	Case	Compatibility w/Sensors	Wireless Options
Em5B	5	49 KB (18,000 scans)	Several months	Impact-resistant IP52, NEMA 3R	EC-5, GS1, 10HS, EC-10, EC-20, ECT and RT-1 temperature, ECRN-50 precipitation	None
Em50	5	1 MB (36,000 scans)	1 – 3 years	Weatherproof, UV- and impact-resistant IP55, NEMA 3R	EC-5, 10HS, 5TM, 5TE, EC-TM, MPS-1, PAR, Total Solar Radiation, LWS, Temp, Temp/RH, precipitation, wind speed	None
Em50R	5	1 MB (36,000 scans)	6 months – 1 year	Weatherproof, UV- and impact-resistant IP55, NEMA 3R	EC-5, 10HS, 5TE, EC-TM, MPS-1, PAR, LWS, Temp, Temp/RH, precipitation, wind speed	900 MHz, 922 MHz, 2.4 GHz
em50g	5	1 MB (36,000 scans)	6 months – 1 year	Weatherproof, UV- and impact-resistant IP55, NEMA 3R	EC-5, 10HS, 5TM, 5TE, EC-TM, MPS-1, PAR, Total Solar Radiation, LWS, Temp, Temp/RH,	GSM



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precipitation,  
wind speed

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## Accessories



## ECH20 Utility

