



HOBO® RG3-M Data Logger

Rain Gauge (Metric) Data Logger

The Data Logging Rain Gauge is a battery-powered rainfall data collection and recording system which includes a HOBO® Pendant Event data logger integrated into a tipping-bucket rain gauge. This model automatically records up to 3200 mm of rainfall data that can be used to determine rainfall rates, times and duration. Also records temperature when used with an optional solar radiation shield (RS1 Solar Radiation Shield, or M-RSA). A base station or shuttle is required.



Supported Measurements:

Rainfall

Key Advantages:

- A high quality tipping-bucket rain gauge includes a HOBO Pendant Event data logger. Base station or shuttle is required.
- Time and date stamp is stored for each tip - provides detail needed to determine rainfall rates and duration.
- Reliable, field-proven rain gauge.
- Compatible with HOBOWare and HOBOWare Pro software for logger setup, graphing and analysis.
- Also records temperature when used with an optional solar radiation shield.

HOBO RG3-M Data Logger Specifications

Rain Gauge

Maximum rainfall rate: 12.7 cm (5 in.) per hour

Calibration accuracy: $\pm 1.0\%$ (up to 1 in./hour for the RG3 or 20 mm/hour for the RG3-M)

Resolution: 0.01 in. (RG3) or 0.2 mm (RG3-M)

Calibration: Requires annual calibration: can be field calibrated or returned to the factory for re-calibration

Operating temperature range: 0° to +50°C (+32° to +122°F)

Storage temperature range: -20° to +70°C (-4° to +158°F)

Environmental rating: Weatherproof

Housing: 15.24cm (6-in.) aluminum bucket

Tipping bucket mechanism: Stainless steel shaft with brass bearings

Dimensions: 25.72 cm height x 15.24 cm diameter (10.125 x 6 in.); 15.39 cm (6.06 in.) receiving orifice

Weight: 1.2 Kg (2.5 lbs)

Part numbers: RG3 (0.01 in. per tip), RG3-M (0.2 mm per tip)

The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).

Logger

Time stamp resolution: 1.0 second

Time accuracy: ± 1 minute per month at 25°C (77°F), see Plot B on page 10.

Operating range: -20° to 70°C (-4° to 158°F)

Environmental rating (for logger used outside of rain gauge): Tested to NEMA 6 and IP67; suitable for deployment outdoors

NIST traceable certification: Available for temperature only at additional charge; temperature range -20° to 70°C (-4° to 158°F)

Battery: CR-2032 3V lithium battery; 1 year typical use

Memory: 64K bytes – 16K to 23K tips when recording rain only; 25K to 30K data points when recording rain and temperature

Materials: Polypropylene case; stainless steel screws; Buna-N o-ring; PVC cable insulation

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Temperature Measurement

Measurement range: -20° to 70°C (-4° to 158°F)

Accuracy: $\pm 0.47^\circ\text{C}$ at 25°C ($\pm 0.85^\circ\text{F}$ at 77°F), A solar radiation shield is required for accurate temperature measurements in sunlight.

Resolution: 0.10°C at 25°C (0.18°F at 77°F)

Drift: Less than 0.1°C/year (0.2°F/year)

Response time: Airflow of 1 m/s (2.2 mph): 10 minutes, typical to 90%

Contact Us

Sales (8am to 5pm ET, Monday through Friday)

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- ▶ Call 1-508-759-9500
- ▶ In U.S. toll free 1-800-564-4377
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Technical Support (8am to 8pm ET, Monday through Friday)

- ▶ Contact Product Support www.onsetcomp.com/support/contact
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