

RG3 Data Logging Rain Gauge

0.2 mm RG3-M 0.01 in RG3 15.2 cm diameter x 25.7 cm high (6 x 10 in) 1.2 kg (2.5 lbs) The HOBO RG3 data logging rain gauge is a self-contained rainfall logger that includes an integrated data logger with a high-quality tipping-bucket rain gauge. The RG3's logger has a built-in temperature sensor and is on a cable so it can be used in an optional radiation shield for logging air temperature.

Key Advantages (RG3 and RG3-M models):

- Aluminum housing and 15.4 cm (6.06 in.) collector ring
- Field-proven design
- Logger can be moved into an optional radiation shield for logging air temperature
- Three mounting feet to use on flat, level surfaces (three screws included)
- Side bracket for mast mounting (hose clamps included)
- Self-emptying for continuous rainfall logging

Up to 320 cm (RG3-M), up to 160 in (RG3) 0.2 mm (RG3-M), 0.01 in (RG3)

1 second

±1.0% (up to 20 mm/hr [RG3-M], 1 in/hr [RG3])

12.7 cm (5 in.) per hour

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Ensure top of Rain

Temperature

Resolution:

Time stamp

Resolution:

Calibration

Accuracy:

Maximum

rainfall rate:

Range: -20° to 70°C (-4° to 158°F)

Accuracy: $\pm 0.47^{\circ}$ @ 25°C ($\pm 0.85^{\circ}$ @ 77°F);

a solar radiation shield is required for temperature measurements

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

Sample rate: 1 second to 18 hours, user-selectable

Memory

16,000 to 23,000 tips when recording rainfall only 25,000 to 30,000 total measurements when recording rainfall and temperature

Mounting the Rain Gauge

The HOBO Rain Gauge has provisions for mounting two ways: surface mounting (Figure 1) and pole mounting (Figure 2). Surface mounting is recommended where possible. Note: Figure 2 has logger deployed outside of rain gauge housing, mounted inside an optional solar radiation shield.

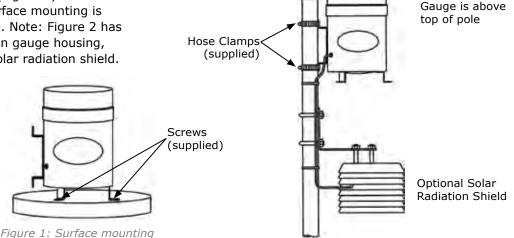


Figure 2: Mast mounting

General Mounting Considerations

- The HOBO Rain Gauge housing MUST be mounted in a LEVEL position.
- A clear and unobstructed mounting location is necessary to obtain accurate rainfall readings. Tall objects can interfere with accurate rain measurements. It is recommended that you place the rain gauge away from the obstruction by a distance greater than three times the height of the obstruction If that is not possible, raise the rain gauge as high as possible to avoid shedding.
- Avoid splashing and puddles. Be sure the gauge is high enough above any surface that rain will not splash into the top of the collector.
- Vibration can significantly degrade accuracy of the tipping bucket mechanism. In windy locations make sure that the bucket will be vibration-free.
- For maximum sensitivity in low-moisture environments you can remove the collector screen. This eliminates water retention on the screen which could evaporate before being measured. The tradeoff is that without the screen, debris can get into the funnel and clog the orifice.

Complete system requires logger, software and base station.

Ordering Information	
RG3 (0.01 in) RG3-M (0.2 mm)	
BHW-PRO-CD	
BASE-U-1	
U-DT-1	
U-DTW-1	
M-RSA	
M-MPB	
M-TPB	
M-SKB	
M-GWA	
M-SKA	

HOBOware software is available for download via the web. Visit onsetcomp.com for details.

U-DTW-1 Data Shuttle can be used in place of base station (BASE-U-1)(See pages 70-71 for details).