# HOBO® UA-003-64 Data Logger

## Pendant Event Data Logger

Accurately measure rainfall with the HOBO Pendant Event Data Logger. Determine rainfall rates, times, and duration after deployment with most standard tipping-bucket rain gauges. Efficiently gather and store momentary contact events and temperature data. Additionally, gain access to detailed event data. Event data is only stored when it happens for better memory usage. Use a solar radiation shield for accurate temperature measurement in sunlight applications. See RS1 Solar Radiation Shield (assembly required) and M-RSA (pre-assembled) Solar Radiation Shield.

### Supported Measurements:

Event, Rainfall and Temperature

### Key Advantages:

- Ideal for recording rainfall with tipping-bucket rain gauges
- Records tips or momentary contact closures and temperature
- Event-based data storage provides detailed data and efficient memory usage
- Stores over 16,000 tips (160 in. of rainfall with a 0.01 in. rain gauge)
- Includes scaling to inches, millimeters or other units

For a self-contained rainfall logger, see the HOBO RG3 which includes a data logger integrated into a tipping-bucket rain gauge.

## HOBO UA-003-64 Data Logger Specifications

**External Event Input**
**Event sensor:** Two-wire interface suitable for measuring mechanical and electrical contact closures
**Maximum input frequency:** 1 Hz (1 pulse per second)
**Lockout time:** 500 ms
**Minimum pulse width:** 1 ms (hardware debounce)
**Input/output impedance:** 100 k
**Edge detection:** Falling edge, contact closure, or Schmitt-trigger buffer
**Preferred switch type:** Normally open. For maximum battery life, the event input should be used with its preferred switch type. The logger will work with normally closed switches, but battery life will be compromised.
**Open circuit input voltage:** Battery voltage; nominally 3.0 V
**Maximum input voltage:** Battery voltage + 0.3 V
**User connection:** 24 AWG, 2 leads: white (+), black (-)

Temperature Measurement
**Measurement range:** -20° to 70°C (-4° to 158°F)
**Accuracy:** ± 0.53°C from 0° to 50°C (± 0.95°F from 32° to 122°F), see Plot A. A solar radiation shield is required for accurate temperature measurements in sunlight.
**Resolution:** 0.14°C at 25°C (0.25°F at 77°F), see Plot A
**Drift:** Less than 0.1°C/year (0.2°F/year)
**Response time:** Airflow of 2 m/s (4.4 mph): 10 minutes, typical to 90%

**Logger**
**Time accuracy:** ± 1 minute per month at 25°C (77°F), see Plot B
**Operating range:** -20° to 70°C (-4° to 158°F)
**Environmental rating:** Tested to NEMA 6 and IP67; suitable for deployment outdoors
**Drop specification:** 1.5 m (5 ft) onto concrete
**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
**Materials:** Polypropylene case; stainless steel screws; Buna-N o-ring; PVC cable insulation
**Weight:** 50 g (1.7 oz.)
**Dimensions:** 71 x 33 x 23 mm (2.8 x 1.3 x 0.9 inches); 1.8 m (6 ft) cable

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