# **ONSET**

## **UTBI-001 Data Logger**

### TidbiT v2 Water Temperature Data Logger

Only 3x4 cm, this tiny data logger measures temperatures over a wide temperature range. The TidbiT v2 provides 12-bit resolution and has ±0.2 °C accuracy. It is designed for outdoor and underwater environments and is waterproof to 300 m (1000 ft). An optical USB interface allows users to offload data in seconds. Please note, a solar radiation shield is required to obtain accurate air temperature measurements in sunlight (RS1 Solar Radiation Shield, assembly required; or M-RSA pre-assembled Solar Radiation Shield).



#### **Supported Measurements:**

Temperature and Water Temperature

#### **Key Advantages:**

- Onset's smallest temperature data logger
- Waterproof to 300 meters (1,000 feet)
- Data readout in less than 30 seconds via fast Optic USB interface

#### **UTBI-001 Data Logger Specifications**

#### **Temperature Sensor**

Operation range:\* -20° to 70°C (-4° to 158°F) in air; maximum sustained temperature of 30°C (86°F) in water\*

Accuracy: ±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)

Resolution: 0.02°C at 25°C (0.04°F at 77°F)

Response time: 5 minutes in water; 12 minutes in air moving 2 m/sec; 20 minutes in air moving 1 m/sec (typical to 90%)

Stability (drift): 0.1°C (0.18°F) per year

#### Logger

Real-time clock: ± 1 minute per month 0° to 50°C (32° to 122°F)

Battery: 3 Volt lithium, non-replaceable

Battery life (typical use): 5 years with 1 minute or greater logging interval

Memory (non-volatile): 64K bytes memory (approx. 42,000 12-bit temperature measurements)

**Weight:** 19.6 g (0.69 oz)

Dimensions: 3.0 4.1 1.7 cm (1.2 1.6 0.68 in.); mounting bail 4.6 mm (3/16 in.) diameter hole

Wetted materials: Epoxy case Waterproof: To 305 m (1000 ft.)

Logging interval: Fixed-rate or multiple logging intervals, with up to 8 user-defined logging intervals and durations; logging

intervals from 1 second to 18 hours. Refer to HOBOware software manual.

Launch modes: Immediate start, delayed start

Offload modes: Offload while logging; stop and offload

Battery indication: Battery level can be viewed in status screen and optionally logged in datafile. Low battery indication in

datafile.

#### **Environmental Rating: IP68**

NIST certificate: Available for additional charge

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

\* To guarantee accuracy, the TidbiT v2 Temp must not be used in condensing environments and water temperatures higher than 30C (86F) for more

than eight cumulative weeks over the life of the logger. Frequent or prolonged exposure will lead to measurement drift and eventual failure.