



The HOBO TidbiT MX2205 is ideal for monitoring shallow waters, like streams and wetlands, or for monitoring soil in fields that are prone to flooding. Equipped with both an internal sensor to monitor ambient temperature and an external sensor on a 2m cable to accurately monitor fast-changing temperatures, the HOBO TidbiT Mx2205 is a low-cost, easy-to-use, waterproof logger that leverages the power of Bluetooth to deliver high-accuracy data straight to your mobile device or Windows laptop running Onset's free HOBObconnect app. This rugged logger withstands harsh environments, and can be deployed just above water or soil for quicker, more convenient data downloads that don't require pulling up the logger.

Features:

- Fast temperature-response time (20 seconds)
- External temperature sensor, plus internal sensor for ambient temp monitoring
- $\pm 0.2^{\circ}\text{C}$ ($\pm 0.36^{\circ}\text{F}$) accuracy
- Large memory stores 96,000 measurements
- 3-year battery life (Bluetooth on); 5-year battery life (Bluetooth off)
- LED indicates when temperature exceeds set threshold
- Two mounting tabs for use with screws or zip ties ensure secure deployment
- Convenient wireless setup and download via Bluetooth
- Works with Onset's free HOBObconnect app

Technical Specifications:**Temperature Sensors**

Range	: Probe -40 to 100°C (-40 to 212°F), with tip and cable immersion in fresh water up to 50°C (122°F) for one year Logger -20° to 70°C (-4° to 158°F) in air; -20° to 50°C (-4° to 122°F) in water, maximum sustained temperature in water 30°C (86°F)
Accuracy	: Probe $\pm 0.25^{\circ}\text{C}$ from -40 to 0°C (± 0.45 from -40 to 32°F) $\pm 0.2^{\circ}\text{C}$ from 0 to 70°C (± 0.36 from 32 to 158°F) $\pm 0.25^{\circ}\text{C}$ from 70 to 100°C (± 0.45 from 158 to 212°F)
Logger	: $\pm 0.25^{\circ}\text{C}$ from -20° to 0°C ($\pm .45^{\circ}\text{F}$ from -4° to 32°F) $\pm 0.2^{\circ}\text{C}$ from 0° to 70°C ($\pm 0.36^{\circ}\text{F}$ from 32° to 158°F)
Resolution	: 0.01°C (0.018°F)
Drift	: <0.1°C (0.18°F) per year
Response Time	: Probe 3 minutes in air moving 1 m/sec; 20 seconds in stirred water Logger 15 minutes typical to 90% in air moving 1 m/s, unmounted; 4 minutes typical to 90% in stirred water, unmounted

Logger

Logger Operating Range	: -20° to 70°C (-4° to 158°F)
Buoyancy (Fresh Water)	: 14.26 g (0.50 oz) negative
Waterproof Rating	: To 30.5 m (100 ft)
Radio Power	: 1 mW (0 dBm)
Transmission Range	: Approximately 30.5 m (100 ft) line-of-sight
Wireless Data Standard	: Bluetooth Low Energy (Bluetooth Smart)
Logging Rate	: 1 second to 18 hours
Time Accuracy	: ± 1 minute per month at 25°C (77°F)
Battery	: CR2477 3V lithium, non-replaceable

Battery Life	: 3 years, typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always Off disabled in software. 5 years, typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always Off enabled in the app. Faster logging intervals and statistics sampling intervals, burst logging, remaining connected with the app, excessive downloads, and paging may affect battery life.
Memory	: 96,000 measurements
Full Memory Download Time	: Approximately 45 seconds; may take longer the farther the device is from the logger.
Wetted Materials	: Epoxy case, Santoprene (TPE) boot
Dimensions	: 4.06 x 6.99 x 3.51 cm (1.6 x 2.75 x 1.38 inches) External temperature sensor diameter: 0.53 cm (0.21 in.) External sensor cable length: 2 m (6.56 ft.)
Weight	: 70.0 g (2.47 oz.)
Environmental Rating	: Ip68

Compatible Items:

Communications:

MX Gateway : MXGTW1