

MX2205

HOBO TidbiT MX External Temp Data Logger

Bluetooth logger with external sensor

Waterproof logger with both internal and external sensors designed for monitoring fast-changing temperatures; can be deployed just above water surface or soil for convenient wireless data offloading.

Important Information

Requires a compatible mobile device or Windows computer and the HOBObconnect app. System requirements for the app can be found at the bottom of the HOBObconnect software page.



Compatible with
HOBObconnect[®] Monitoring App
LI-COR Cloud[®] MX Data Plan



Supported Measurements

Temperature, Water Temperature

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

Contact Us

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

- Email sales@onsetcomp.com
- Call 1-508-759-9500
- In U.S. toll free 1-800-564-4377
- Fax 1-508-759-9100

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

- Contact Product Support www.onsetcomp.com/support/contact
- Call 1-508-759-9500
- In U.S. toll free 1-877-564-4377

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HOBO TidbiT MX External Temp Data Logger (MX2205) 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 ±0.25°C from -40 to 0°C ((±0.45 from -40 to 32°F)) ±0.2°C from 0 to 70°C ((±0.36 from 32 to 158°F)) ±0.25°C from 70 to 100°C ((±0.45 from 158 to 212°F)) Logger ±0.25°C from -20° to 0°C ((±.45°F from -4° to 32°F)) ±0.2°C from 0° to 70°C ((±0.36°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

