

MX2203

HOBOb TidbiT MX Temperature 400-ft Data Logger

Bluetooth

A waterproof temperature logger that uses the power of Bluetooth to deliver high-accuracy data straight to your mobile device or Windows computer running our free HOBObconnect app.

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. Get cloud storage and access to the powerful tools of LI-COR Cloud™ IoT software! (formerly HOBOblink) Add an MX Data Plan!



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



Supported Measurements

Soil Temperature, Temperature, Water Temperature

Features

- Convenient wireless setup and download via Bluetooth
- Large memory stores 96,000 measurements
- Waterproof to 120 meters (400 feet)
- Water-detection feature records when logger is in and out of the water
- User-replaceable battery
- Waterproof boot protects the logger during deployment
- LED indicates when temperature exceeds set threshold

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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Bourne, MA 02532

HOBO TidbiT MX Temperature 400-ft Data Logger (MX2203) Specifications

Temperature Sensor

Range	-20° to 70°C in air; -20° to 50°C in water (-4° to 158°F in air; -4° to 122°F in water)
Accuracy	±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 per year (<0.18°F per year)
Response Time	17 minutes typical to 90% in air moving 1 m/s, unmounted; 7 minutes typical to 90% in stirred water, unmounted

Logger

Logger Operating Range	-20° to 70°C (-4° to 158°F)
Buoyancy (Fresh Water)	3.1 g negative (0.11 oz negative)
Depth Rating	IP68; waterproof to 122 m (400 ft)
Water Detection	Water conductivity level of 100 µS/cm or greater necessary for reliable detection of water. Deionized water or water below 100 µS/cm may not be detected. The water conductivity circuit may not reliably detect water that has frozen around the electrodes, i.e. below 0°C (32°F).
Radio Power	1 mW (0 dBm)
Transmission Range	Approximately 30.5 m line-of-sight (Approximately 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 (±1 minute per month at 77°F)
Battery	CR2477 3V lithium, user 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 or Bluetooth Off Water Detect enabled in software. Faster logging intervals and statistics sampling intervals, burst logging, remaining connected with the app, excessive downloads, and paging may impact battery life. To ensure proper battery installation, see Battery Information for detailed instructions on replacing the battery in the MX2203 logger.
Memory	96,000 measurements
Full Memory Download Time	Approximately 45 seconds; may take longer the farther the device is from the logger
Wetted Materials	Polypropylene case, Delrin® battery cover, EPDM O-ring, stainless steel screws, Santoprene® (TPE) boot
Dimensions	4.45 x 7.32 x 3.58 cm (1.75 x 2.88 x 1.41 inches)
Weight	36.2 g (1.28 oz)

CE Compliance Mark unknown

United States FCC Mark unknown

Russia, New Zealand, and Regulatory Compliance Marks (CE, FCC, etc.) unknown