# **ONSET**

# HOBO® MX2203 Data Logger

## **TidbiT MX Temperature 400'**

A waterproof temperature logger that uses the power of Bluetooth to deliver high-accuracy data straight to your mobile device or Windows computer running Onset's free HOBOconnect app. Designed for durability, this rugged is ideal for long-term deployments in streams, lakes, and oceans (up to 400-foot depths). Also includes a feature to detect and record the presence of water, which is ideal for monitoring intermittent water applications. Data collection in the field has never been easier!



#### **Key Advantages:**

- · 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 alarm notifies you when temperature exceeds set threshold
- · Battery life extension feature
- Works with Onset's free HOBOconnect app
- ±0.2°C (±0.36°F) accuracy

### **HOBO MX2203 Data Logger 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)
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)
Waterproof	To 122 m (To 400 ft)
Water Detection	Water conductivity level of 100 $\mu$ S/cm or greater necessary for reliable detection of water. Deionized water or water below 100 $\mu$ S/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
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)
Environmental Rating	IP68
Compliance Marks	C € FC △ IS ⊕

#### **Contact Us**

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

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Technical Support (8am to 6pm ET, Monday through Friday)

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