



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 HOBObconnect app. Designed for durability, this rugged logger 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!

### 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
- Battery life extension feature
- Works with Onset's free HOBObconnect app
- $\pm 0.2^{\circ}\text{C}$  ( $\pm 0.36^{\circ}\text{F}$ ) accuracy

### What's In The Box

- HOBO MX2203 Data Logger
- Protective boot

**Technical 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)
Waterproof	: To 122 m (To 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)
Environmental Rating	: Ip68