



HOBO[®] MX2201 Data Logger

Pendant MX Water Temperature Data Logger

The HOBO MX2201 waterproof temperature logger leverages the power of Bluetooth Low Energy (BLE) to deliver accurate temperature measurements straight to your iOS or Android mobile device. Designed for durability, this compact waterproof logger is ideal for measuring temperature in streams, lakes, oceans, and soil environments. Data collection in the field has never been easier!

Remotely access your data in Onset's cloud-based HOBOLink software with the new MX Gateway. (indoor deployments)

Mounting Requirements: It is very important that the logger housing does not get distorted when mounted. For mounting these loggers to any non-flat surface, such as rebar or posts, we recommend using the Mounting Boot (BOOT-MX2201-2201). This boot is also useful for mounting loggers such that they can be easily removed for service.

Supported Measurements:

Soil Temperature, Temperature and Water Temperature

Key Advantages:

- Convenient wireless setup and download via Bluetooth Low Energy (BLE)
- Large memory stores 96,000 measurements
- Waterproof to 30 meters (100 feet)
- User-replaceable battery
- Mounting tabs for fast, easy deployment
- LED alarm notifies you when temperature exceeds set threshold
- Works with Onset's free HOBOMobile app
- $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) accuracy



HOBO MX2201 Data Logger Specifications

Temperature Sensor (MX2201 and MX2202)

Range	-20° to 70°C (-4° to 158°F) in air -20° to 50°C (-4° to 122°F) in water
Accuracy	±0.5°C from -20° to 70°C (-4° to 158°F)
Resolution	0.04°C (0.072°F)
Drift	<0.1°C (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

Radio Power	1 mW (0 dBm)
Transmission Range	Approximately 30.5 m (100 ft) line-of-sight
Wireless Data Standard	Bluetooth Smart (Bluetooth Low Energy, Bluetooth 4.0)
Logger Operating Range	-20° to 70°C (-4° to 158°F) in air
Logging Rate	1 second to 18 hours
Buoyancy (Fresh Water)	2g (0.07 oz) positive
Waterproof	To 30.5 m (100 ft)
Memory	96,000 measurements
Battery	CR2032 3V lithium, user replaceable
Battery Life	1 year typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always On in software. 2 years typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always Off 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.
Time Accuracy	± 1 minute per month at 25°C (77°F)
Full Memory Download	Approximately 45 seconds; may take longer the farther the device is from the logger
Wetted Materials	Polypropylene case, EPDM O-ring
Dimensions	3.35 x 5.64 x 1.8 cm (1.32 x 2.22 x 0.69 inches)
Weight	12.75 g (.45 oz)

The CE Marking identifies this product as complying with all relevant directives in the European Union (EU). This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.