



HOBO[®] MX2202 Data Logger

Pendant MX Temperature/Light Data Logger

The HOBO MX2202 waterproof temperature/light level logger leverages the power of Bluetooth Low Energy (BLE) to deliver accurate temperature and light-level 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!

Supported Measurements:

Light Intensity, Temperature and Water Temperature

Key Advantages:

- New light sensor offering more accurate light intensity readings for light in the visible light spectrum
- 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
- $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) temperature accuracy and $\pm 10\%$ light accuracy typical for direct sunlight



HOBO MX2202 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

Light Sensor (MX2202)

Range	0 to 167,731 lux (15,582 lum/ft ²)
Accuracy	±10% typical for direct sunlight (see Light Measurement on page 2 in the manual for more details)

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 Off disabled in software. 2 years typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always Off 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.
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).