

Bluetooth (BLE) Weatherproof loggers for outdoor temperature and humidity measurements



With Onset’s new HOBO MX2300 Series Temp/RH loggers, field data collection has never been easier. You can set up and offload loggers wirelessly from your mobile device – eliminating the need to take a laptop or data shuttle into the field to retrieve data.

Remotely access your data in Onset’s cloudbased HOBOLink software with the new MX Gateway

Key Advantages:

- Weatherproof housing for use in outdoor or condensing environments
- High-accuracy measurements
- RH sensor provides superior recovery from condensing conditions
- Small-diameter, external sensor versions for measurements in tight spaces
- Wireless setup & download via Bluetooth Low Energy (BLE)

Supported Measurements:

- Temperature
- Relative Humidity
- Dew Point

Choice of Models:

The HOBO MX2300 Series offers five models covering a broad range of outdoor monitoring applications, from agricultural research to forest ecology studies. The series includes internal sensor models that are highly durable and easy to deploy, and external probe models that are well-suited for monitoring conditions in soils, water, walls, and more.

Minimum System Requirements:



HOBOLink



Mobile device

- iOS 10.X, 11.X, 12.X and 13
- Android 7, 8, 9 and 10
- Bluetooth 4.X and up



Technical Specifications:

Part number	MX2301A (Internal Temp/RH)	MX2302A (External Temp/RH)	MX2303 (2x External Temp)	MX2304 (External Temp)	MX2305 (Internal Temp)
Temperature Sensor					
Range	-40 to 70°C (-40 to 158°F)		-40 to 100°C (-40 to 212°F) with tip and cable immersion in fresh water up to 50°C (122°F) for one year		-40 to 70°C (-40 to 158°F)
Accuracy	±0.25°C from -40 to 0°C (±0.45 from -40 to 32°F) ±0.2°C from 0 to 70°C (±0.36 from 32 to 158°F) ±0.25°C from 70 to 100°C (±0.45 from 158 to 212°F), MX2303 and MX2304 only				
Resolution	0.04°C (0.072°F)				
Drift	<0.01°C (0.018°F) per year				
Relative Humidity Sensor (MX2301, MX2302 only)					
Range	0 to 100% RH, -40° to 70°C (-40° to 158°F); exposure to conditions below -20°C (-4°F) or above 95% RH may temporarily increase the maximum RH sensor error by an additional 1%				
Accuracy	±2.5% from 10% to 90% (typical) to a maximum of ±3.5% including hysteresis at 25°C (77°F); below 10% RH and above 90% RH: ±5% typical				
Resolution	0.01%				
Drift	<1% per year typical				
Logger					
Memory	128 KB (63,488 measurements, maximum)		128 KB (84,650 measurements, maximum)		
Operating Range	-40° to 70°C (-40° to 158°F), IP67 and NEMA#6				
Transmission Range	Approximately 30.5 m (100 ft) line-of-sight				
Logging Rate	1 second to 18 hours				
Dimensions	Logger housing: 10.8 x 5.08 x 2.24 cm (4.25 x 2.0 x 0.88 in.)				
Mobile Device Compatibility	iOS 8.3, 8.4 & 9.0, and Bluetooth 4.0 or later				
CE compliant	Yes				

HOBOconnect® App for MX Data Loggers

Easy logger setup and data management with your mobile device or Windows computer

Onset's free HOBObconnect app makes it fast and easy to configure compatible HOBO MX Series data loggers (chart below) and manage the collected data. Just download the app from the Apple App Store or Google Play to your mobile device, or download from our website to your Windows computer. With HOBObconnect, you can view data in graphs, check the operational status of loggers, share data files and graph images for analysis in Excel, Numbers, and other applications, plus store data in the cloud. HOBObconnect also lets you quickly set up audible alarm notifications, so you're immediately alerted to any problems.



Key Advantages:

- Communicates to HOBO MX data loggers using Bluetooth (LE) technology
- No internet connection required
- Set data logger's name, password, logging rate, alarm threshold, start and stop time
- Automatically upload data to Onset's cloud-based HOBOLink software to store and merge data files
- Configure and clear audible alarms
- Page the data logger
- Quickly download and view data
- Export and share data as CSV, TXT, XLSX, or HOBO files