## **ONSET**.

### **NEW HOBO MX2300** Series Loggers

# 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.



#### **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 with Bluetooth Low Energy (BLE)



#### **Supported Measurements:**

Mobile device

Temperature, Relative Humidity, Dew Point

#### **Minimum System Requirements:**



BOmobile

#### **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.

| Part number                 | MX2301<br>(Internal Temp/RH)   | MX2302<br>(External Temp/RH) | MX2303<br>(2x External Temp)  | MX2304<br>(External Temp) | MX2305<br>(Internal Temp)     |
|-----------------------------|--|------------------------------|---|---------------------------|-------------------------------|
|                             | Temperature Sensor   |                              |   |                           |                               |
| Range                       | -40 to 70°C (-40 to 158°F)   |                              | -40 to 100°C (-40 to 212°F) with tip and<br>cable immersion in fresh water up to<br>50°C (122°F) for one year |                           | -40 to 70°C<br>(-40 to 158°F) |
| Accuracy                    | ±0.25°C from -40 to 0°C (±0.45 from -40 to 32°F)<br>±0.2°C from 0 to 70°C (±0.36 from 32 to 158°F)<br>±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                  | 0.05%  |                              |   |                           |                               |
| Drift                       | <1% per year typical   |                              |   |                           |                               |
|                             | Logger   |                              |   |                           |                               |
| Memory                      | 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  |                              |   |                           |                               |

