ONSET

Onset HOBO Data Loggers & Weather Stations
2021

Data Logger Platforms



USB Loggers
Short-term trend logging
with manual offload

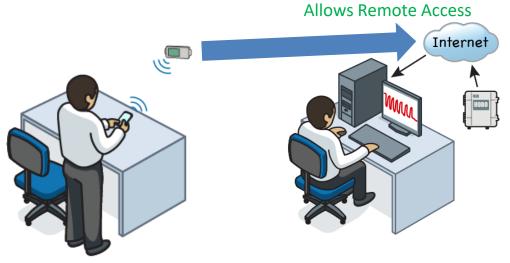




Bluetooth Loggers
Wireless data access via
mobile devices



Web-based Systems
Long-range wireless
internet access

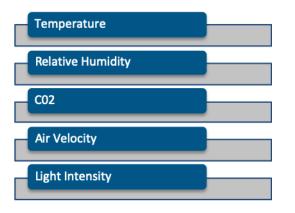




Measurements

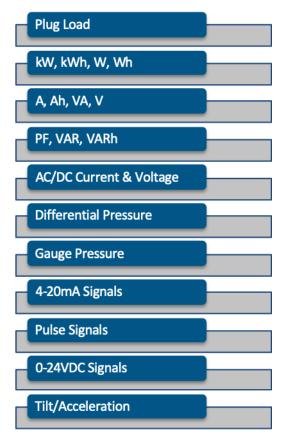


Environmental





Energy/Power





Time-of-Use

Light On/Off

Motor On/Off

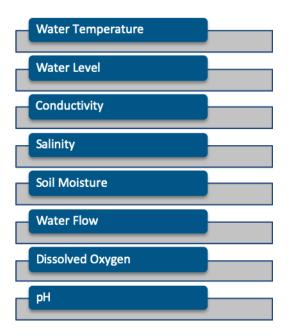
State Changes

Occupancy/Light

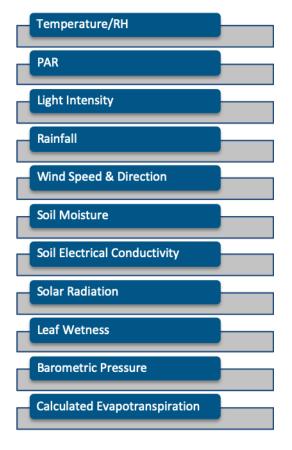


Measurements











4-20mA signals	
Pulse signals	
0-24VDC signals	
Tilt/Acceleration	



Environmental Monitoring



Climate Monitoring



HOBOnet Field Monitoring System Web-enabled, Scalable,

Environmental Monitoring



Stand-alone StationUSB Environmental Monitoring



HOBO RX3000
Weather Station Kits
Web-enabled Environmental
Monitoring



HOBO MX2300 SeriesBluetooth Temperature/RH



HOBO MicroRX Station
4G Cellular Environmental
Monitoring



HOBO U23 Series USB Temperature/RH



HOBOnet Field Monitoring System

Web-enabled, Scalable, Environmental Monitoring



- Lowest cost-per-measurement point
- Wide coverage with wireless mesh technology that can communicate through vegetation
- Scalable, with up to 50 wireless sensors streaming back to a central, cloud-based weather station
- Remote access to data and current conditions with customizable dashboard
- Alarm notifications when conditions reach user-set thresholds



HOBOnet Station & Sensors



Wireless Sensors

- Connect up to 50 wireless sensors
- 900 MHz wireless mesh technology
- 600m line-of-sight range
- No additional data fee charges per sensor



HOBO RX3000-3G/WiFi/ETHWeather Station

- Low-cost data plans available
- Cloud-based data access
- Wide range of sensors



Plug-and-Play Sensors

- Connect up to 10 plug-and-play Smart Sensors
- Reliable, research-grade performance
- No need for programming or complicated wiring



Soil Moisture



Temperature & Humidity



Rainfall



Light – PAR & Solar Radiation



Wind Speed & Direction



Leaf Wetness



Barometric Pressure



Water Level



Calculated Evapotranspiration



Pulse Input



HOBO RX3000 Remote Monitoring Station

Environmental Monitoring



- Web-based data access
- Plug-and-play operation
- Flexible support for a broad range of sensors
- LCD display for easy field deployment
- Cloud-based data access through HOBOlink
- Alarm notifications via text, email
- Rugged double-weatherproof enclosure



HOBO Weather Station Models



HOBO RX3000-4G/WiFi/ETH Remote Monitoring Station

- 10 Smart Sensor inputs
- Cloud-based data access
- Wide range of sensors
- Optional analog sensor & relay modules



HOBO U30-NRC Remote Monitoring Station

- 5 or 10 Smart Sensor inputs
- Optional analog sensor input
- Built-in relay
- Wide range of sensors



HOBO RX3000 Basic Remote Weather Station Kit



HOBO RX3000 Intermediate Remote Weather Station Kit



HOBO RX3000 Advanced
Remote Weather Station Kit





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Onset Weather Stations

HOBOlink Cloud Interface





HOBO RX2100 Series MicroRX

4G Cellular Multi-channel Station



- Optional water level sensor input, and water flow conversion
- Weatherproof IP66 enclosure for harsh environments
- Wide range of research-grade plug-and-play sensors
- Includes five smart sensor inputs
- Hinged door and integrated mounting tabs
- Real-time monitoring with up to 10-minute connection rates via 4G cellular



HOBO RX2100 Series Models







HOBO RX2105 & 06 MicroRX Station

- Optional integrated solar panel
- Wide range of plug-and-play sensors
- Real-time monitoring via 4G cellular

HOBO RX2101 & 02 MicroRX Station

- Optional integrated solar panel
- Wide range of plug-and-play sensors
- Real-time monitoring via 4G cellular
- Station-side alarms

HOBO RX2103 & 04 MicroRX Water Level Station

- Optional integrated solar panel
- Wide range of plug-and-play sensors
- Real-time monitoring via 4G cellular
- Pre-programmed water flow formulas
- Water flow and accumulated rainfall alarms
- Non-vented water level sensor



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HOBO H21-USB Micro Station

Multi-channel Monitoring of Microclimates



- Compact size for easy deployment
- Weatherproof IP66 enclosure for harsh environments
- Direct USB offload--no need for an adapter cable
- Includes five smart sensor inputs
- Hinged door and integrated mounting tabs
- Runs for up to a year on four standard AA batteries



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HOBO MX2300 Series

Bluetooth Low Energy Temperature/RH Loggers



- Convenient wireless setup and download via Bluetooth Low Energy (100-ft range)
- Retrieve data in hard-to-reach locations
- Visual alarms alert you to out-of-range conditions
- Compact, weatherproof housing
- View current data in real time with free HOBOconnect app
- Share downloaded data easily from your mobile device



HOBO MX2300 Series Models



HOBO MX2303

- 2 External temperature logger
- Range: Temp: -40 to 100° C



HOBO MX2304

- External temperature logger
- Range: Temp -40 to 100° C



HOBO MX2305

- Temperature logger
- Range: Temp: -40 to 70° C



HOBO MX2302

- External temperature/RH logger
- Range: Temp: -40 to 70 ° C
- Range: RH: 0 to 100% RH,
 -40 to 70° C



HOBO MX2304

- Temperature/RH logger
- Range: Temp -40 to 70° C
- Range: RH: 0 to 100% RH,
 -40 to 70° C



HOBO MX2300 Series

Bluetooth Low Energy Temperature/RH Loggers

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.







HOBO U23 Series

USB Temperature/RH Loggers



- Ideal for use in outdoor/condensing environments
- User-replaceable relative humidity sensors
- Internal and external sensor models available
- Optic USB interface for fast, reliable data offload
- Stores 42,000 measurements
- 3-year user-replaceable battery
- Free HOBOware software



HOBO U23 Series Models



HOBO U23-001

- Temperature/RH logger
- Range: Temp:-40° to 70° C



HOBO U23-002

- 2 External temperature/RH logger
- Range: Temp -40° to 70° C



HOBO U23-004

- External temperature logger
- Range: Temp:-40° to 100° C

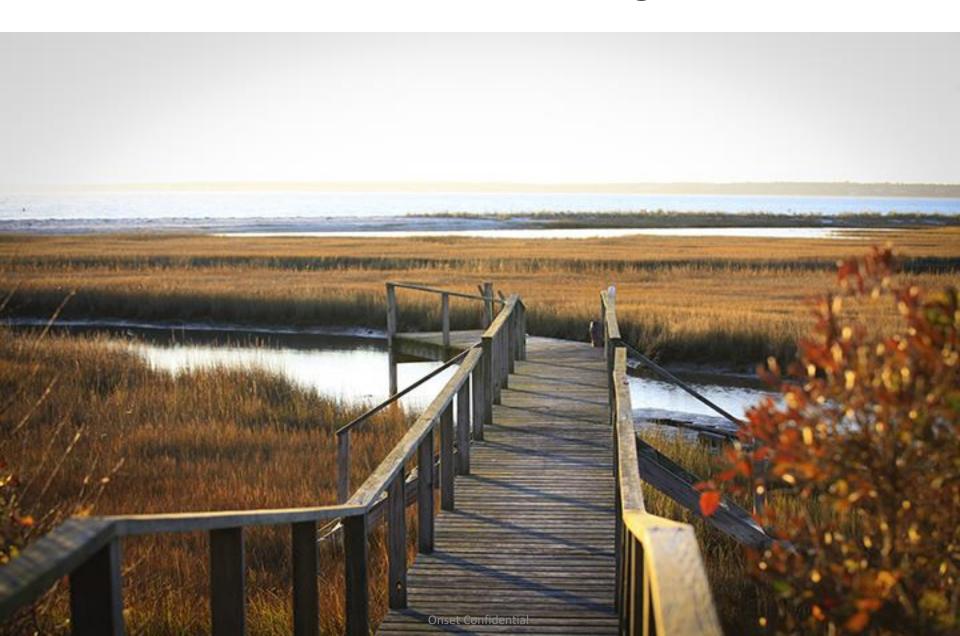


HOBO U23-003

- 2 External temperature logger
- Range: External sensors -40° to 100° C



Water Monitoring



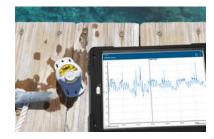
Water Monitoring



HOBO MX2001Bluetooth Low Energy
Water Level Logger



HOBO U22 USB Water Temperature Logger



HOBO TidbiT SeriesTemperature Loggers



HOBO Pendant Series
Temperature, Temp/Light
Loggers



HOBO MX2501Bluetooth Low Energy pH Logger



HOBO U20 SeriesUSB Water Level Loggers



HOBO U24 Series
USB Conductivity/Salinity
Loggers



HOBO U26 SeriesUSB Dissolved Oxygen
Logger



HOBO MX2001

Bluetooth Low Energy Water Level Logger



- Wireless data offload to mobile devices
- Direct-read cable connects sensor to top end of cable
- Reference water level can be entered at start of deployment
- Durable ceramic sensor
- Powered by two user-replaceable AA batteries
- Free HOBOconnect software App



HOBO U22

Water Temperature Logger

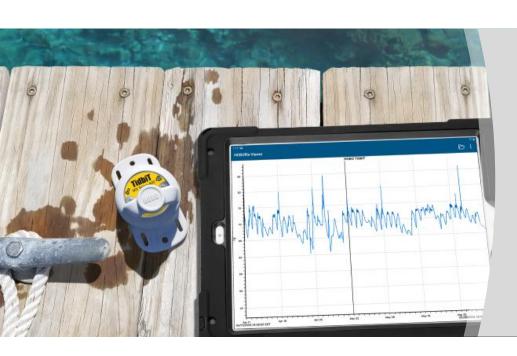


- Range: -40° to 70° C
- Resolution: 0.02° C at 25° C
- Research-grade measurements at an affordable price
- Waterproof to 120 meters (400 feet)
- Data readout in less than 30 seconds via fast Optic USB interface
- Free HOBOware software



TidbiT Series

Waterproof Temperature Loggers



- Up to 98k measurements
- Resolution: up to 0.01° C (0.018° F)
- Wireless bluetooth or USB data offload
- Waterproof up to 1,524 meters (5,000 feet)
- Low-cost enables broader spatial coverage
- Waterproof housing for wet/underwater use
- Free software



HOBO TidbiT Series Models



TidbiT MX2203

- Water temperature
- Bluetooth (BLE) data offload
- Range: -20° to 70° C (-4° to 158° F)
 in air -20° to 50° C (-4° to 122° F)
 in water
- Memory: 98K measurements
- Depth rating: 400 ft



TidbiT MX2204

- Water temperature
- Bluetooth (BLE) data offload
- Range: -20° to 70° C (-4° to 158° F) in air -20° to 50° C (-4° to 122° F) in water
- Memory: 98K measurements
- Depth rating: 5000 ft



TidbiT v2 UTBI-001

- Water temperature
- USB interface data offload
- Range: -20° to 70° C
 (-4° to 158° F) in air
 30° C (86° F) in water
- Memory: 42K 12-bit measurements
- Depth rating: 1000 ft



HOBO Pendant Series

Weather and Waterproof Bluetooth Loggers



- Wireless setup and download via Bluetooth Low Energy (BLE)
- Large memory stores 98k measurements
- Temperature, temp/light models
- Waterproof to 30 meters (100 feet)
- User-replaceable battery
- Low-cost enables broader spatial coverage
- Waterproof housing for wet/underwater use
- Free HOBOware software



HOBO Pendant Series Models



HOBO MX2201

- Water temperature
- Range: -20° to 70° C (-4° to 158° F)
 in air -20° to 50° C (-4° to 122° F)
 in water
- Memory: 98K measurements
- Depth rating: 100 ft



HOBO MX2202

- Water temperature / Light
- Range: -20° to 70° C (-4° to 158° F)
 in air -20° to 50° C (-4° to 122° F)
 in water
- Memory: 98K measurements
- Depth rating: 100 ft



HOBO Pendant Series

Weather and Waterproof USB Loggers



- Temperature, temp/light, event and accelerometer models
- Low-cost enables broader spatial coverage
- Compact and easy to deploy
- Data readout in less than 30 seconds via fast Optic USB interface
- Free HOBOware software



HOBO Pendant Series Models continued



HOBO UA-001-08

- Water temperature
- Range: In water/ice: -20° to 50° C
- Memory: 6.5K



HOBO UA-002-64

- Acceleration, tilt
- Range: In water/ice: -20° to 50° C
- Memory: 52K



HOBO UA-001-64

- Water temperature
- Range: In water/ice: -20° to 50° C
- Memory: 52K



HOBO UA-001-64

- Temperature, event, rainfall
- Range: In water/ice: -20° to 70° C
- Memory: 52K



HOBO UA-002-08

- Water temperature, light intensity
- Range: Temperature: -20° to 70° C
- Memory: 6.5K



HOBO UA-002-08

- Water temperature, light intensity
- Range: Temperature: -20°
 to 70° C



HOBO MX2501

pH & Temperature Logger



- Guided pH calibration following on-screen prompts in HOBOconnect app
- Freshwater and saltwater environments
- Wireless bluetooth or USB data offload
- Water detection system for longer battery life and less maintenance
- Potentiometric pH electrode
- User-replaceable battery, pH electrode, and anti-biofouling copper guard
- Accuracy of ± 0.10 pH units within $\pm 10^{\circ}$ C



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HOBO U20 Series

Water Level Loggers



- Self-contained non-vented design enables easy deployment
- Ideal for use in both fresh and saltwater environments
- Depths up to 100 feet
- Durable ceramic pressure sensor withstands freezing
- HOBOware Pro software provides easy barometric pressure compensation



HOBO U20 Series Models



HOBO U20L-01/02/04

- Depth: 30ft/100ft/13ft
- Measures: temperature, barometric Pressure, water level



HOBO U20-001-01/02/03/04/Ti

- Depth: 30ft/100ft/250ft/13ft
- Measures: temp, barometric Pressure, water level
- Stainless or titanium



HOBO U24 Series

USB Conductivity/Salinity Loggers



- Two models to choose from for fresh and salt water deployments
- Non-contact sensor provides long life
- Provides easy access to sensor for cleaning and shedding air bubbles
- HOBOware Pro software enables start/endpoint calibration to compensate for any fouling and provides easy conversion to specific conductance and salinity



HOBO U24 Series Models



HOBO U24-01

- Fresh water monitoring
- Temperature, Conductivity/Salinity
- Accuracy of 3% or 5 μS/cm



HOBO U24-002C

- Salt water monitoring
- Temperature, Conductivity/Salinity
- Accuracy of 3-5% depending on salinity level



HOBO U26

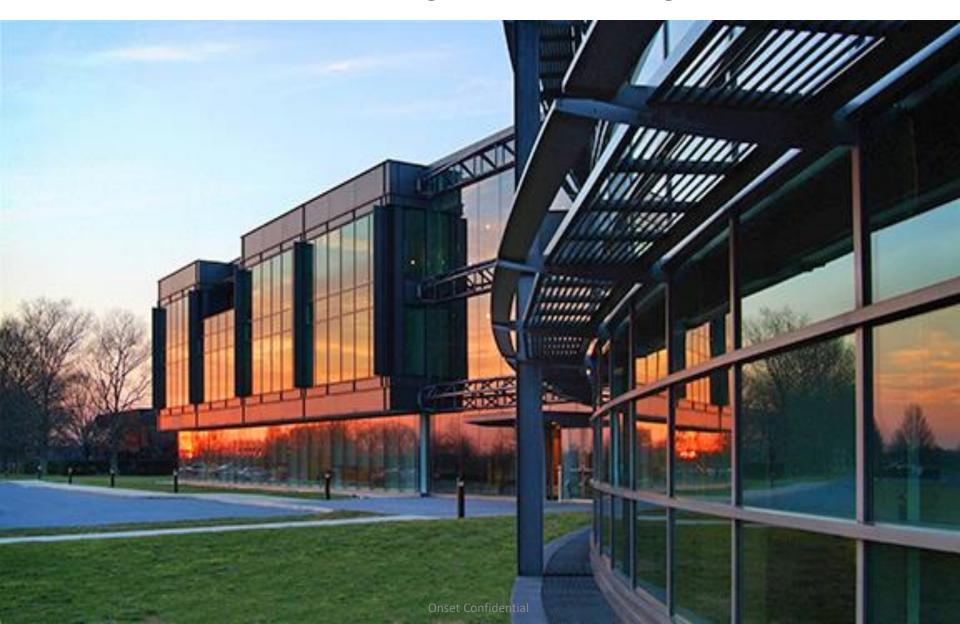
Dissolved Oxygen Logger



- 21,700 sets of DO and temperature measurements
- 0.2 mg/L accuracy
- Optical DO sensor technology for long-lasting calibration with less maintenance
- HOBOware Pro's DO Assistant software corrects for measurement drift from fouling; provides salinity-adjusted DO concentrations and % saturation
- Easy-to-replace DO sensor cap



Building Monitoring



Indoor Environmental Monitoring



HOBO MX1100 Series
Bluetooth Low Energy (BLE)
Loggers



HOBO UX100 SeriesUSB Temp/RH Loggers



HOBO UX120 Series
USB Multi-Channel Loggers



HOBO UX90 SeriesUSB Time-of-Use Loggers



ONSET EG4100 SeriesPower Monitoring Systems



HOBO MX1100 Series

Bluetooth Low Energy (BLE) Loggers



- Measures temperature, relative humidity, CO2, light intensity, and more
- Requires no dedicated equipment beyond mobile device for configuring/reading out
- Ideal for projects where loggers are placed in hardto-reach or limited access areas
- Free HOBOconnect app for iOS and Android enables fast, easy logger setup, readout and data management
- Patented connectivity technology
- Audible alarms notify you when conditions exceed set thresholds



HOBO MX1100 Series Models



HOBO MX1104

- Integrated Temp/RH/Light & Analog input
- Accuracy +/- 0.20C and +/- 2.5%RH
- Range -20° to 70C and 0% to 100%RH
- 1.9 million measurements max



HOBO MX1105

- 4-channel analog inputs
- Accuracy ± 0.001 mA $\pm 0.2\%$ of reading
- Range 0 to 20.1 mA
- 1.9 million measurements max



HOBO MX1101

- Integrated Temp/RH
- Accuracy +/- 0.2C and +/- 2%RH
- Range -20° to 70C and 1% to 90%RH
- 84k measurements



HOBO MX1102

- Integrated CO₂/Temp/RH
- Accuracy ± 50 ppm $\pm 5\%$ (CO₂)
- Range 0 to 5,000 ppm (CO₂)
- 84k measurements



HOBO MXGTW1

- Range 30.5 m (100 ft) line-of-sight
- Bluetooth 5.0
- WiFi or Ethernet
- AC adapter or Power over Ethernet (PoE)



Bluetooth Low Energy Analog/Temp/RH/Light Logger



- BLE communications for wireless data offload
- 16-bit resolution for highly accurate measurements
- Fast deployment using optional self-describing sensors with automatic configuration
- Wide range of measurements from compatibility with existing sensors
- Option to add the MX Gateway for near realtime, remote access to data



Bluetooth Low Energy 4-Channel Analog Logger



- BLE communications for wireless data offload
- 16-bit resolution for highly accurate measurements
- Fast deployment using optional self-describing sensors with automatic configuration
- Wide range of measurements from compatibility with existing sensors
- Option to add the MX Gateway for near realtime, remote access to data



Bluetooth Low Energy 4-Channel Analog Logger

Available Measurements



Self-Describing Sensors





Bluetooth Low Energy Temp/RH Logger

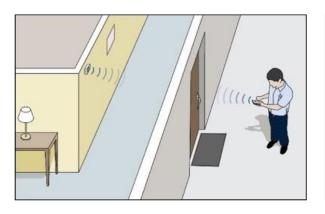


- Wireless communication via Bluetooth Low Energy (BLE) technology
- Easy to deploy and offload using free HOBOconnect app
- Visual and audible high & low alarm thresholds
- Stores 84,000 measurements
- Accuracy: +/- 0.2C and +/- 2%RH
- Find me/pager feature

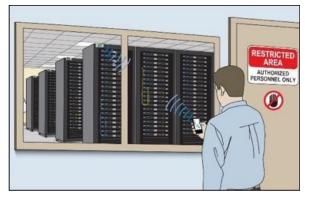


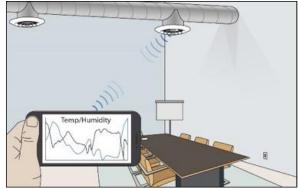
Bluetooth Low Energy Temperature/RH Logger

Configure and manage temperature/RH data over a 100-foot range without ever coming into physical contact with the MX1101 logger.











Bluetooth Low Energy Temperature Logger



- Set up and offload loggers wirelessly from your mobile device
- Exceptional value for the convenience of a BLE communication logger
- Splash-proof design enables use in damp environments and spray-down applications
- Deploy, offload, and share temperature data using the HOBOconnect app
- Visual alarms on the logger display and mobile app keep you notified of problems
- Set up and start monitoring in minutes!



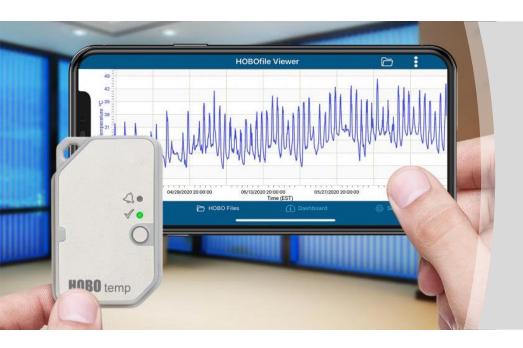
Bluetooth Low Energy CO₂/Temperature/RH Logger



- Wireless communication via Bluetooth Smart
- Six-month battery life at 5-minute CO₂ logging rate
- Easy to deploy and offload using free HOBOconnect App
- Visual and audible high & low alarm thresholds
- Self-calibrating CO₂ sensor technology ensures optimal accuracy at lower maintenance costs



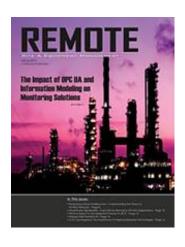
Bluetooth Temperature Logger



- Set up and offload loggers wirelessly from your mobile device – no internet, cables, or computer required
- Exceptional value for the convenience of a BLE communication logger
- Splash-proof design enables use in damp environments and spray-down applications
- Easy to deploy, offload, and share temperature data using the HOBOconnect app
- Visual alarms on the logger display and mobile app keep you notified of problems



Bluetooth Low Energy Temperature/RH Logger



Editor's Choice

The HOBO MX1101 data logger and HOBOconnect app were an Editor's Choice in Remote Site and Equipment Management Magazine, Spring 2015 edition.

Customer Testimonials

"The MX1101 Bluetooth Low Energy data logger enabled our engineers to access critical environmental data in an apartment unit, without disrupting tenants or remediation workers."

-Greg Lowitz, Founder and CEO, Buildera

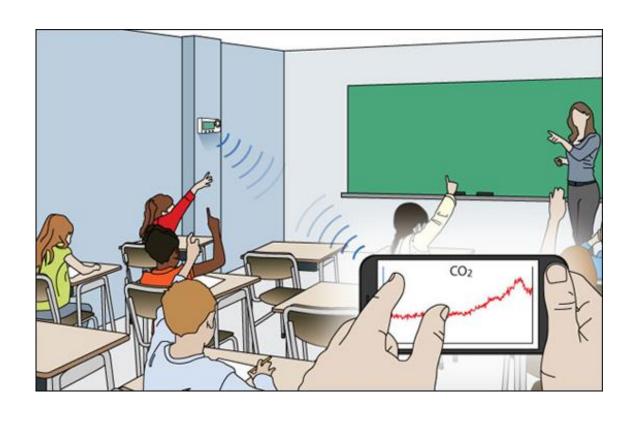
"We have various locations that need to be monitored at The Alamo, so Bluetooth capability was a necessity. We chose the HOBO MX1101 because it is quick and efficient."

-Pamela Rosser, conservator, The Alamo



Bluetooth Low Energy CO₂/Temperature/RH Logger

Configure and manage CO₂/temperature/RH data over a 100-foot range without ever coming into physical contact with the MX1102 logger.





HOBO MXGTW1

MX Gateway – Remote Access to Your Data



- View and analyze data in HOBOlink from any HOBO MX BLE data logger connected to the MX Gateway
- Near real-time measurements transmitted to your HOBOlink dashboard
- Alarm notifications (out-of-range sensor, low battery, stopped logger, missing logger)
- Unlimited cloud storage via HOBOlink
- 100-foot line-of-site communication
- Wi-Fi & Ethernet connectivity



HOBO UX100 Series

USB Temperature/RH Loggers



- Temp, temp/RH & thermocouple models
- Improved accuracy & response time
- Large memory capacity
- Flexible mounting options
- Visual high & low alarm thresholds
- New Burst & Statistics logging modes
- User-replaceable RH sensor
- Free HOBOware software



HOBO UX100 Series Models



HOBO UX100-001

- Integrated Temp
- Accuracy \pm 0.2C
- 84k measurements



HOBO UX100-003

- Integrated Temp/RH
- Accuracy 3.5% (RH)
- Range 15% to 95% (RH)
- 84k measurements



HOBO UX100-011

- Integrated Temp/RH
- Accuracy 2.5% (RH)
- Range 1% to 95% (RH)
- 84k measurements



HOBO UX100-014

- Single Input Thermocouple
- Accuracy 0.6C plus thermocouple
- Range 15% to 95%
- 208k measurements



HOBO UX100-023

- External Temp/RH
- Accuracy 2.5% (RH
- Range 15% to 95%
- 84k measurements



HOBO UX90 Series

USB Time-of-Use Loggers



- State, motor on/off, light on/off, and occupancy
 & light models
- LCD displays on-time or % on, providing instant feedback
- Auto-calibration & signal strength indicator
- 84k or 346k measurement capacity
- Flexible mounting options
- Free HOBOware software



HOBO UX90 Series Models



HOBO UX90-001/M

- State logger
- Download speed: 10 secs/30 secs
- 84k/346k measurements



HOBO UX90-002/M

- Light On/Off
- Download speed: 10 secs/30 secs
- 84k/346k measurements



HOBO UX90-004/M

- Motor On/Off
- Download speed: 10 secs/30 secs
- 84k/346k measurements



HOBO UX90-005/M

- Occupancy & Light On/Off 5 meter
- Download speed: 10 secs/30 secs
- 84k/346k measurements



HOBO UX90-006/M

- Occupancy & Light On/Off 12 meter
- Download speed: 10 secs/30 secs
- 84k/346k measurements



HOBO UX120 Series

USB Multi-Channel Loggers



- Plug Load, 4-channel Analog, Thermocouple & Pulse models
- High-accuracy measurements at a low cost
- Flexible range of measurements
- Large memory capacity
- User-upgradeable firmware
- Free HOBOware software



HOBO UX120 Series Models



HOBO UX120-018

- Time-stamped & totalized energy use
- Download speed: 10 secs/30 secs
- 84k/346k measurements



HOBO UX120-014

- 4 channel thermocouple
- 1.6 million measurements



HOBO UX120-006M

- 4 channel analog
- 1.9 million measurements



HOBO UX120-017/M

- 4 channel pulse
- 500,000/4,000,000 measurements



ONSET EG4100 Series

Power Monitoring Systems



- Up to 30 Sensor Inputs
- Supports wide range of current transformers (CTs) to accommodate virtually any size load
- Built-in web server
- Fully web-configurable
- Built-in solid-state memory
- No service contracts
- No batteries



ONSET EG4100 Series Models



EG4115

Core Data Logger 15 input meter



EG4130

Pro Data Logger 30 input meter



Onset Software



HOBOware

Graphing & Analysis for PC & Mac



HOBOConnect

Easy logger setup and data management for iOS or Android mobile devices



HOBOlink

Web-based Display/Readout for RX3000 & HOBOnet Systems



HOBOware/HOBOware Pro

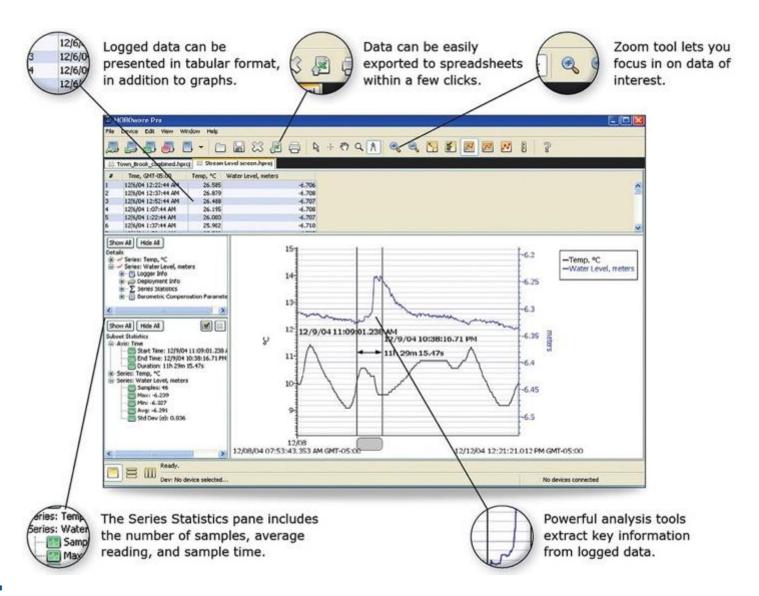
Graphing & Analysis for PC & Mac



- Time-saving tools for fast setup & readout
- Advanced plotting tools for more precise data analysis
- Scaling to real-world engineering units
- Access to Data Assistants
- Ability to create pie charts
- Detailed statistics on measurements within a specific timeframe
- 21 CFR Part 11 Compliance
- Data Shuttle support



HOBOware Pro





HOBOConnect App

for HOBO MX Data Loggers



- Communicate to HOBO MX data loggers using Bluetooth (LE) technology
- No internet connection required
- Set data logger's name, password, logging rate, alarm threshold, start & stop time
- Automatically upload data to Onset's HOBOlink service for storing and merging data files.
- Configure and clear audible alarms
- Free download for iOS and Android



HOBOlink

Web-based Display/Readout for HOBOnet Field Monitoring Systems and HOBO RX3000 Remote Monitoring Systems



- 24/7 web access to your data
- Customizable data display
- Verify RX3000 or HOBOnet status remotely
- Manage alarm notifications over the web
- Configure a dashboard that highlights your most important measurements
- Create dashboards that bring data from multiple systems together in a single view
- Configure calculated channels such as dew point, accumulated rainfall, and evapotranspiration (ET)

