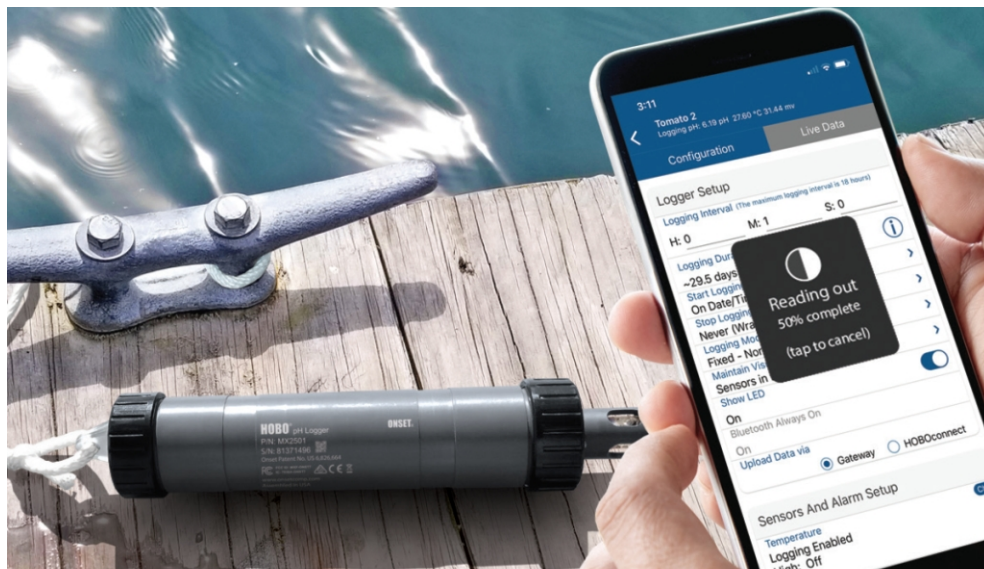# Easy data offload to mobile devices via BLE!

The new low-cost HOBO® MX2501 pH and Temperature logger is designed for long-term monitoring of pH in estuaries, lakes, streams, rivers, and oceans. It communicates wirelessly via Bluetooth Low Energy (BLE) to the

HOBOconnect® app on your phone or tablet, making logger setup, calibration, and data offload quick and easy, with no need for extra equipment or complicated calibration procedures.

Key Advantages:

- Data offload to your mobile device via BLE
- Guided pH calibration with the HOBOconnect app
- Rugged PVC design for freshwater or saltwater deployments
- Water detection feature for longer battery life
- User-replaceable battery, pH electrode, and anti-biofouling copper guard

Minimum System Requirements:

HOBOconnect   Mobile device

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

Supported Measurements:

- pH
- Temperature

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.

ONSET AUTHORIZED DISTRIBUTOR

Technical Specifications:

Part number	MX2501	
	pH Sensor	**mV**
Range	2.00 to 12.00 pH	-512 to 512 mV
Accuracy	±0.10 pH units within ±10°C of temperature at calibration	±0.20 mV
Resolution	0.01 pH	0.02 mV
Response time	1 minute typical to 90% at constant temperature in stirred water	
	Temperature Sensor	
Range	-2° to 50°C (28.4° to 122°F)	
Accuracy	±0.2°C (±0.36°F)	
Resolution	0.04°C (0.072°F)	
Response time	7 minutes typical to 90% in stirred water	
	Logger	
Operating range	-2° to 50°C (28.4° to 122°F) — non-freezing	
Buoyancy	Fresh water: 13.6 g (0.48 oz) negative Salt water: 19.6 g (0.69 oz) negative	
Waterproof	To 40 m (131.2 ft)	
Logging rate	1 second to 18 hours	
Time accuracy	±1 minute per month 0° to 50°C (32° to 122°F)	
Battery Type	One AA 1.5 Volt, user-replaceable	
Battery life	1 year typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always On selected in software. 2 years typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Off Water Detect enabled in software. 3 years typical at 25°C (77°F) with logging interval of 1 minute and Bluetooth Always Off selected in software.	
Memory	152 KB (43,300 measurements, maximum)	
Dimensions	22.86 x 4.27 cm (9.0 x 1.68 inches)	
Weight	268.2 g (9.46 oz)	
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 HOBOconnect 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 HOBOconnect, 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. HOBOconnect also lets you quickly set up audible alarm notifications, so you're immediately alerted to any problems.

Features:

• 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

Subject to Change