



A high-accuracy, cost-effective data logger that measures and records conductivity and temperature in streams, lakes, and other freshwater sources. Recommended for monitoring aquifers for saltwater intrusion and road and agricultural runoff, this logger's open access to its sensor simplifies cleaning and maintenance, and its non-contact sensor minimizes measurement errors related to drift. Also features software-based drift compensation.

The titanium pentoxide coating on the non-contact sensor prevents it from coming into contact with the water, thereby preventing tarnishing or corrosion associated with traditional electrode sensors. This sensor coating is also inert, so fouling can be easily wiped off the sensor.

Features:

- Titanium pentoxide coated non-contact sensor provides long life and less measurement drift
- Provides easy access to sensor for cleaning and shedding air bubbles
- HOBOWare Pro software enables start/end-point calibration to compensate for any fouling and provides easy conversion to specific conductance and salinity
- USB optical interface provides high-speed, reliable data offload in wet environments
- Compatible with the HOBO Waterproof Shuttle for easy and reliable data retrieval and transport

What's In The Box

- HOBO U24-001 Conductivity Data Logger
- Communications window protective cap

Technical Specifications:

Measurements	: Actual Conductivity, Temperature, Specific Conductance at 25°C (calculated)
Conductivity Calibrated	
Measurement Ranges	: Low Range : 0 to 1,000 $\mu\text{S}/\text{cm}$
Full Range	: 0 to 10,000 $\mu\text{S}/\text{cm}$
Conductivity Calibrated Range	: Temperature Range 5° to 35°C (41° to 95°F)
Conductivity Extended Ranges	: Low Range: 0 to 2,500 $\mu\text{S}/\text{cm}$
Full Range	: 0 to 15,000 $\mu\text{S}/\text{cm}$
Temperature Measurement Range	: -2° to 36°C (28° to 97°F)
Specific Conductance Accuracy (in Calibrated Range)	: Low Range: 3% of reading, or 5 $\mu\text{S}/\text{cm}$, and
Full Range	: 3% of reading, or 20 $\mu\text{S}/\text{cm}$, whichever is greater, using Conductivity Data Assistant and calibration measurements
Conductivity Resolution	: 1 $\mu\text{S}/\text{cm}$
Temperature Accuracy	: 0.1°C (0.2°F) at 25°C (77°F)
Temperature Resolution	: 0.01°C (0.02°F)
Conductivity Drift	: Less than 3% sensor drift per year, exclusive of drift from fouling
Response Time	: 1 second to 90% of change (in water)
Operating Range	: -2° to 36°C (28° to 97°F) - non-freezing
Memory	: 18,500 temperature and conductivity measurements when using one conductivity range; 11,500 sets of measurements when using both conductivity ranges (64 KB total memory)
Sample Rate	: 1 second to 18 hrs, fixed or multiple-rate sampling with up to 8 user-defined sampling intervals
Clock Accuracy	: ± 1 minute per month
Battery	: 3.6 Volt lithium battery
Battery Life	: 3 years (at 1 minute logging)
Maximum Depth	: 70 m (225 ft)
Weight	: 193 g (6.82 oz), buoyancy in freshwater: -59.8 g (-2.11 oz)
Size	: 3.18 cm diameter x 16.5 cm, with 6.3 mm mounting hole (1.25 in. diameter x 6.5 in., 0.25 in. hole)
Wetted Housing Materials	: Delrin®, epoxy, stainless steel retaining ring, polypropylene, Buna rubber O-ring, titanium pentoxide (inert coating over sensor)
Environmental Rating	: IP68
CE	: The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).