

HOBO[®] Conductivity Loggers

Conductivity monitoring for freshwater and stable saltwater applications

HOBO Conductivity Loggers are convenient, rugged, and cost-effective data loggers for a variety of freshwater and saltwater monitoring applications.



The HOBO U24-001 model provides high-accuracy conductivity data in freshwater environments, for applications such as environmental impact monitoring, stormwater management, and water quality studies.

The HOBO U24-002-C model is for saltwater environments with relatively small changes in salinity ($\pm 5,000 \mu\text{S}/\text{cm}$) such as saltwater bays, or to detect salinity events such as upwelling, rainstorm, and discharge events. This logger can also be used to gather salinity data for salinity compensation of HOBO U26 Dissolved Oxygen logger data. **Note:** This logger is not intended for monitoring salinity levels in waters with widely changing salinities as it can have significant measurement error and drift in those environments.

Supported Measurements: Conductivity, Salinity, Temperature

Key Advantages:

- Non-contact capacitive sensor provides long life
- Easy access to sensor for cleaning and shedding air bubbles
- HOBOware Pro software provides compensation for fouling using calibration points from the start and end of each deployment
- Optical interface provides high-speed, reliable data offload in wet environments
- Compatible with HOBO Waterproof Shuttle for easy and reliable data retrieval

Minimum System Requirements:



Software



Base Station*



Coupler¹

*HOBO Base Station or HOBO Waterproof Shuttle required.

¹Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

► For complete information and accessories, please visit: www.onsetcomp.com

| Part number | U24-001 Conductivity | U24-002-C Conductivity/Salinity |
|---|---|--|
| Memory | 18,500 temperature and conductivity measurements when using one conductivity range; 14,400 sets of measurements when using both conductivity ranges (64 kbytes) | |
| Conductivity Calibrated Measurement Ranges | Low Range: 0 to 1,000 $\mu\text{S}/\text{cm}$ Full Range: 0 to 10,000 $\mu\text{S}/\text{cm}$ | Low Range: 100 to 10,000 $\mu\text{S}/\text{cm}$ High Range: 5,000 to 55,000 $\mu\text{S}/\text{cm}$ |
| Conductivity Calibrated Range – Temperature Range | 5° to 35°C (41° to 95°F) | |
| Specific Conductance Accuracy (in Calibrated Range using Conductivity Assistant and Calibration Measurements) | Low Range: 3% of reading, or 5 $\mu\text{S}/\text{cm}$ Full Range: 3% of reading, or 20 $\mu\text{S}/\text{cm}$, whichever is greater | Low Range: 3% of reading or 50 $\mu\text{S}/\text{cm}$, whichever is greater High Range: 5% of reading, in waters within a range of $\pm 3,000$ $\mu\text{S}/\text{cm}$; waters with greater variation can have substantially greater error |
| Conductivity Resolution (typical) | 1 $\mu\text{S}/\text{cm}$ | 2 $\mu\text{S}/\text{cm}$ |
| Conductivity Drift | Less than 3% sensor drift per year | Up to 12% sensor drift per month. Use monthly start & end-point calibration to compensate |
| Temperature Accuracy (in Calibrated Range) | 0.1°C (0.2°F) | |
| Temperature Resolution | 0.01°C (0.02°F) | |
| Response Time | 1 second to 90% of change (in water) | |
| Measurement and Operating Range | 0° to 36°C (32° to 97°F) -non-freezing | -2° to 36°C (28° to 97°F) -non-freezing |
| Sample rate | 1 second to 18 hrs, fixed or multiple-rate sampling with up to 8 user-defined sampling intervals | |
| Time Accuracy | ± 1 minute per month | |
| Battery | 3.6 Volt lithium battery, life: 3 years (at 1 minute logging), typical | |
| Maximum Depth | 70 m (225 ft) | |
| Dimensions | 3.18 cm diameter x 16.5 cm, with 6.3 mm mounting hole (1.25 in diameter x 6.5", $\frac{1}{4}$ in hole) | |
| CE compliant | Yes | |