



HOBO® U20L-01 Data Logger

Water Level (30 ft)

A low-cost, research-grade data logger for continuous monitoring of water level and temperature up to 30-ft depths in a wide range of underwater environments. This logger features 0.1% measurement accuracy, a polypropylene housing for use in both freshwater and saltwater, and a non-vented design for convenient and hassle-free deployment.




Key Advantages:

- Self-contained, non-vented design enables easy deployment
- Ideal for use in both freshwater and saltwater environments, including wells, streams, lakes, wetlands, and tidal areas
- Depths up to 30 feet
- Durable ceramic pressure sensor withstands freezing
- HOBOWare Pro software provides easy conversion to accurate water level reading, fully compensated for barometric pressure, temperature, and water density

Note: A calibration certificate is not offered for this logger. If you require a NIST-traceable calibration certificate, please see the [U20-001-01](#) (freshwater) or [U20-001-01-Ti](#) (saltwater).

HOBO U20L-01 Data Logger Specifications

Pressure (Absolute) and Water Level Measurements U20L-01	
Operation Range	0 to 207 kPa (0 to 30 psia); approximately 0 to 9 m (0 to 30 ft) of water depth at sea level, or 0 to 12 m (0 to 40 ft) of water at 3,000 m (10,000 ft) of altitude
Factory Calibrated Range	69 to 207 kPa, 0° to 40°C (10 to 30 psia, 32° to 104°F)
Burst Pressure	310 kPa or 18 m depth (45 psia or 60 ft depth)
Water Level Accuracy*	Typical error: ±0.1% FS, 1.0 cm (0.03 ft) water Maximum error: ±0.2% FS, 2.0 cm (0.06 ft) water
Raw Pressure Accuracy**	±0.3% FS, 0.62 kPa (0.09 psi) maximum error
Resolution	<0.02 kPa water (0.007 ft water)
Pressure Response Time (90%)***	<1 second at a stable temperature; measurement accuracy also depends on temperature response time
Temperature Measurements (All Models)	
Operation Range	-20° to 50°C (-4° to 122°F)
Accuracy	±0.44°C from 0° to 50°C , see manual for plot (±0.79°F from 32° to 122°F , see manual for plot)
Resolution	0.10°C at 25°C , see manual for plot (0.18°F at 77°F , see manual for plot)
Response Time (90%)	10 minutes in water (typical)
Stability (Drift)	0.1°C per year (0.18°F per year)
Logger	
Real-time Clock	±1 minute per month 0° to 50°C (32° to 122°F)
Battery	2/3 AA, 3.6 Volt lithium, factory-replaceable
Battery Life (Typical Use)	5 years with 1 minute or greater logging interval
Memory (Non-volatile)	64K bytes memory (approx. 21,700 pressure and temperature samples)
Weight	Approximately 154 g (5.43 oz) in air Approximately 53.9 g (1.9 oz) in fresh water
Dimensions	3.18 cm (1.25 inches) diameter, 15.24 cm (6.0 inches) length; mounting hole 6.3 mm (0.25 inches) diameter
Wetted Materials	Polypropylene housing and lanyard; Viton and Buna-N O-rings; ceramic sensor in acetal end cap; stainless steel screws suitable for saltwater
Logging Interval	Fixed-rate or multiple logging intervals, with up to 8 user-defined logging intervals and durations; logging intervals from 1 second to 18 hours. Refer to the HOBOWare User's Guide for details.
Launch Modes	Immediate start and delayed start
Offload Modes	Offload while logging; stop and offload
Battery Indication	Battery voltage can be viewed in status screen and optionally logged in datafile. Low battery indication in datafile.
Environmental Rating	IP68
Compliance Marks	

Contact Us

Sales (8am to 5pm ET, Monday through Friday)

- ▶ Email sales@onsetcomp.com
- ▶ Call 1-508-759-9500
- ▶ In U.S. toll free 1-800-564-4377
- ▶ Fax 1-508-759-9100

Technical Support (8am to 6pm ET, Monday through Friday)

- ▶ Contact Product Support www.onsetcomp.com/support/contact
- ▶ Call 1-508-759-9500
- ▶ In U.S. toll free 1-877-564-4377

Onset Computer Corporation
470 MacArthur Boulevard
Bourne, MA 02532