Onset Computer Corporation

HOBO U20 Titanium Water Level Data Logger - U20-001-01-Ti

30-Foot Depth - saltwater

Measures:

Temperature, Barometric Pressure, Water Level

Features:

- Lightning protection - no long signal wires, and electronics are shielded in a titanium housing for use in saltwater (see the Water Level logger sensor location drawing)
- HOBOware Pro software provides easy conversion to accurate water level reading, fully compensated for barometric pressure (see demo) temperature, and water density.
- Multiple-rate sampling (see demo) allows faster sampling at critical times such as when pumping starts or stops.
- Also available in narrow depth range (U20-001-04-Ti)
- Ideal for use in wells, streams, lakes, wetlands and tidal areas
- No-vent-tube design for easy reliable deployment
- Available in stainless and titanium versions
- Durable ceramic pressure sensor
- 3-point NIST-traceable calibration certificate included

Qty	1-9	10-99	100+
$US	$595	$553	$506

Contact Onset at 1-800-564-4377

Description:

The HOBO Water Level Titanium is recommended for saltwater deployment for recording water levels and temperatures in wetlands and tidal areas. This data logger features high accuracy at a great price and HOBO ease-of-use, with no cumbersome vent tubes or desiccants to maintain.

View how the HOBO Water Level Logger compares to the Competition.

Detailed Specifications:

Pressure and Water Level Measurements U20-001-01 and U20-001-01-Ti	
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 (10 to 30 psia), 0Â° to 40Â°C (32Â° to 104Â°F)
Burst Pressure	310 kPa (45 psia) or 18 m (60 ft) depth
Water Level Accuracy*	Typical error: Â±0.05% FS, 0.5 cm (0.015 ft) water Maximum error: Â±0.1% FS, 1.0 cm (0.03 ft) water
Raw Pressure Accuracy**	Â±0.3% FS, 0.62 kPa (0.09 psi) maximum error
Resolution	<0.02 kPa (0.003 psi), 0.21 cm (0.007 ft) water
Pressure Response Time (90%)***	<1 second; measurement accuracy also depends on temperature response time
Temperature Measurements (All Models)	
Operation Range	-20Â° to 50Â°C (-4Â° to 122Â°F)
Accuracy	Â±0.44Â°C from 0Â° to 50Â°C (Â±0.79Â°F from 32Â° to 122Â°F), see Plot A
Resolution	0.10Â°C at 25Â°C (0.18Â°F at 77Â°F), see Plot A
Response Time (90%)	5 minutes in water (typical)

Stability (Drift)	0.1Â°C (0.18Â°F) per year
Logger	
Real-time Clock	Â± 1 minute per month 0Â° to 50Â°C (32Â° to 122Â°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	Stainless steel models: approximately 210 g (7.4 oz) Titanium models: approximately 140 g (4.8 oz)
Dimensions	2.46 cm (0.97 inches) diameter, 15 cm (5.9 inches) length; mounting hole 6.3 mm (0.25 inches) diameter
Wetted Materials	Titanium, VitonÂ® o-rings, acetyl cap, ceramic sensor
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 software manual.
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.
CE	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU).

* Water Level Accuracy: With accurate reference water level measurement, known water density, accurate Barometric Compensation Assistant data, and a stable temperature environment.

** Raw Pressure Accuracy: Absolute pressure sensor accuracy includes all sensor drift, temperature, and hysteresis-induced errors.

*** Changes in Temperature: Allow 10 minutes in water to achieve full temperature compensation of the pressure sensor. Maximum error due to rapid thermal changes is approximately 0.5%.