

KIT-D-U20-01-TI-THOT

HOB0 Water Level Data Logger Deluxe Kit (30')

Combining high accuracy water level measurements with out-of-the-box convenience, this money-saving kit includes everything needed to start logging right away.

Available in titanium for saltwater/brackish wetlands and tidal areas.



Supported Measurements

Absolute Pressure, Barometric Pressure, Water Level, Water Temperature

Features

- Lightning protection; no long signal wires, and electronics are shielded in titanium housing
- HOB0ware Pro software provides easy conversion to accurate water level reading, fully compensated for barometric pressure, temperature, and water density
- Multiple-rate sampling allows faster sampling at critical times such as when pumping starts or stops
- No-vent-tube design for easy reliable deployment
- Durable ceramic pressure sensor

This Kit includes

- U20-001-01-Ti, HOB0 data logger (30' range)
- U20-001-04-Ti, HOB0 data logger (13' range) for barometric pressure
- U-DTW-1, HOB0 waterproof shuttle with 5 interchangeable couplers
- U20-CASE-1, carrying case
- BHW-PRO-DLD, HOB0ware Pro software (Download)



HOBO Water Level Data Logger Deluxe Kit (30') (KIT-D-U20-01) Specifications

Pressure Sensor

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), 0° to 40°C (32° to 104°F)
Burst pressure	310 kPa (45 psia) or 18 m (60 ft) depth
Water level accuracy*	Typical error - 0.05% FS, 0.5 cm (0.015 ft) water
Maximum error	-0.1% FS, 1.0 cm (0.03 ft) water
Raw pressure accuracy**	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
Thermal response time (90%)†	Approximately 10 minutes in water to achieve full temperature compensation of the pressure sensor

Temperature Sensor

Operation range	-20° to 50°C (-4° to 122°F)
Accuracy	0.37°C at 20°C (0.67°F at 68°F)
Resolution (10-bit)	0.1°C at 20°C (0.18°F at 68°F)
Response time (90%)	3.5 minutes in water (typical)
Stability (drift)	0.1°C (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)
Dimensions	2.46 cm (0.97 inches) diameter, 15 cm (5.9 inches) length; mounting hole 6.3 mm (0.25 inches) diameter
Weight	Approximately 140 g (4.8 oz)
Wetted materials	316 stainless steel, Viton® o-rings, acetyl cap, ceramic sensor
Shock/drop	Logger is sensitive to shocks. Handle with care and avoid any impact. Always use proper packaging when shipping the logger.

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Logger

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 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.
Environmental Rating	IP68

Notices

- * With accurate reference water level measurement and Barometric Compensation Assistant data
- ** Absolute pressure sensor accuracy includes all pressure drift, temperature, and hysteresis-induced errors
- † Maximum error due to rapid thermal changes is approximately 0.5%

