



Combining high accuracy water level measurements with out-of-the-box convenience, this money-saving kit includes everything needed to start logging right away. It is ideal for monitoring water levels and temperatures in wells, streams, lakes and freshwater wetlands, as well as barometric pressure.

**This kit includes:**

- U20-001-02 HOBO data logger (100' range)
- U20-001-04 HOBO data logger (13' range) for barometric pressure
- U-DTW-1 HOBO waterproof shuttle with 5 interchangeable couplers
- U20-CASE-1 carrying case
- HOBOWare Pro software

Like other HOBO Water Level Loggers, the 100-foot version offers exceptional value and ease-of-use, with no cumbersome vent tubes or desiccants to maintain.

**Features:**

- Lightning protection; no long signal wires, and electronics are shielded in stainless-steel housing
- HOBOWare 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
- Available in four depth ranges
- Ideal for use in wells, streams, lakes, wetlands, and tidal areas
- No-vent-tube design for easy reliable deployment
- Durable ceramic pressure sensor

**Technical Specifications:****Pressure Sensor**

Operation range	: 0 to 400 kPa (0 to 58 psia); approximately 0 to 30.6 m (0 to 100 ft) of water depth at sea level, or 0 to 33.6 m (0 to 111 ft) of water at 3,000 m (10,000 ft) of altitude
Factory calibrated range	: 69 to 400 kPa (10 to 58 psia), 0° to 40°C (32° to 104°F)
Burst pressure	: 500 kPa (72.5 psia) or 40.8 m (134 ft) depth
Water level accuracy*	: Typical error - 0.05% FS, 1.5 cm (0.05 ft) water
Maximum error	: - 0.1% FS, 3 cm (0.1 ft) water
Raw pressure accuracy**	: 0.3% FS, 1.20 kPa (0.17 psi) maximum error
Resolution	: < 0.04 kPa (0.006 psi), 0.41 cm (0.013 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

\* 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%.

**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	: 0.1°C at 20°C (0.18°F at 68°F) (10-bit)
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 210 g (7.4 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.
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

The CE Marking identifies this product as complying with the relevant directives in the European Union (EU).