



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.

This kit includes:

- U20-001-04 HOBO data logger (13' range)
- BASE-U-4 base station with 5 interchangeable couplers
- HOBOWare Pro software

Like other HOBO Water Level Data Loggers, the 13-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 (use barometric pressure data from nearby weather station).
- 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 145 kPa (0 to 21 psia); approximately 0 to 4 m (0 to 13 ft) of water depth at sea level, or 0 to 7 m (0 to 23 ft) of water at 3,000 m (10,000 ft) of altitude
Factory calibrated range	: 69 to 145 kPa (10 to 21 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 - 0.075% FS, 0.3 cm (0.01 ft) water
Maximum error	: - 0.15% FS, 0.6 cm (0.02 ft) water
Raw pressure accuracy	: ** 0.3% FS, 0.43 kPa (0.063 psi) maximum error
Resolution	: < 0.014 kPa (0.002 psi), 0.14 cm (0.005 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), see Plot A
Resolution	: 0.1°C at 20°C (0.18°F at 68°F) (10-bit), see Plot A
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