



SBE 56 Temperature Sensor

Product #: 56.1S

USD Price: Contact Sea-Bird

Low-cost, high-accuracy, battery-powered temperature and time recorder, with user-programmable sampling interval.

The SBE 56 is a low-cost, high-accuracy, fast-sampling temperature recorder with USB interface, internal battery, and memory. Data are uploaded upon recovery via the internal USB connector, and output in engineering units (degrees C, date and time). The high stability preserves the initial calibration accuracy and means less frequent (or no) calibrations. The SBE 56 delivers this accuracy and stability at a price you would expect for recorders that are less accurate, and is ideal for countless underwater recording applications.

Memory capacity exceeds 15 million samples. Battery endurance varies, depending on the sampling scheme. Sampling every 0.5 sec, the SBE 56 can be deployed for 1 month (5.3 million samples). Sampling 4 times per minute, the battery lasts almost 2 years.

Flexible Sampling Options

Temperature and time, at user-programmable 0.5-sec to 9-hour intervals.

Autonomous Logging

Internal memory and battery.

Fast Data Upload

Internal USB 2.0 interface; open housing and plug in cable for setup or data upload. Approximately 40 minutes for full memory upload (> 15 million samples).

Data Quality

Rigorous 11-point temperature calibration of each sensor.

Long Deployment Endurance

Lasts up to 2 years on a single AA lithium cell.

Specifications

Clock Accuracy: 5 seconds/month

Depth Rating: 1500 m
Housing Material: Plastic

Memory: Capacity: 15.9 million samples

Temperature Accuracy: $\pm 0.002 \,^{\circ}\text{C} \, (-5 \text{ to } +35 \,^{\circ}\text{C}); \pm 0.01 \,^{\circ}\text{C} \, (+35 \text{ to } +45 \text{ C})$

Temperature Range: -5 to +45°C
Temperature Resolution: 0.0001°C

Temperature Stability: 0.0002 °C/month (0.002 °C/year)
Weight: 0.2 kg in air, 0.05 kg in water