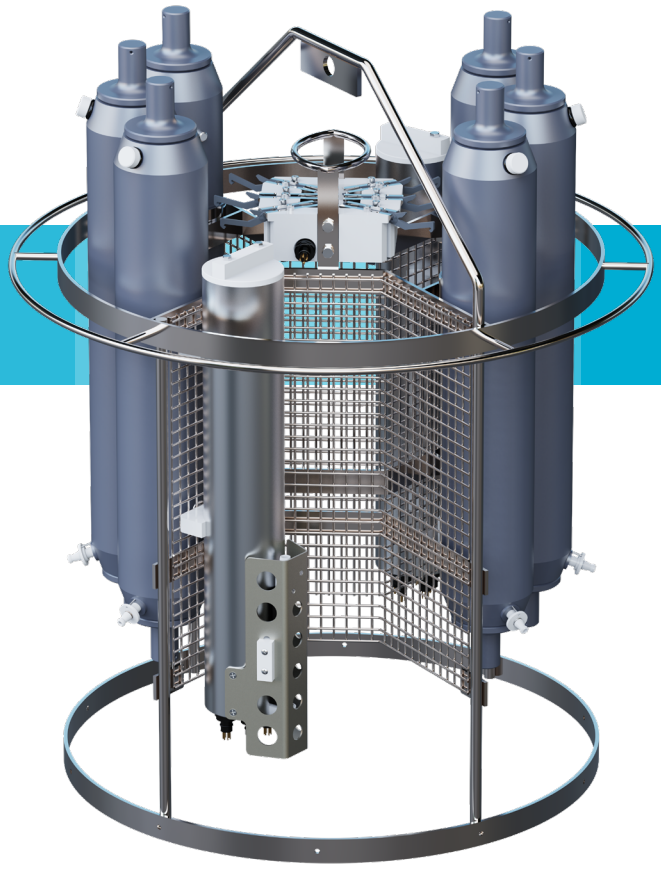
seabird.com | sales@seabird.com | +1 425-643-9866

SBE 55

ECO WATER SAMPLER



Overview

The SBE 55 is the ideal small-boat water sampler for coastal, estuarine, and large lake ecological monitoring. The SBE 55 is light and economical and can be integrated with an SBE 19, 19plus, 19plus V2, 25, 25plus, or 49 CTD. It is available in a three- or six-bottle configuration with 4-liter sample bottles uniquely designed for the SBE 55.

The SBE 55 can operate autonomously on internal batteries and be programmed to close bottles at selected depths, allowing deployment using non-electrical wire or line. It also can be used with an SBE 33 Carousel Deck Unit for real-time CTD data acquisition and water sampling. Real-time operation requires an electro-mechanical cable and slip-ring equipped winch.

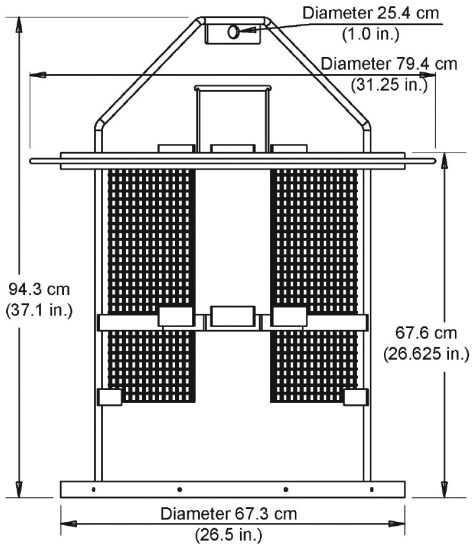
Features

- Small, lightweight, robust water sampler package with open structure for better flushing and less drag.
- Three or six 4-liter bottles; easy do-it-yourself expansion from a three- to a six-bottle system.
- Easy integration with Sea-Bird profiling CTDs.
- Autonomous (pre-programmed) or real-time data acquisition and water sampling; bottle firing in any order.
- Depths to 600 or 3500 m.
- Seasoft© V2 Windows software package (setup, data upload, real-time data acquisition and keyboard control of bottle firing, data processing).
- Five-year limited warranty.

Components

- Electronics Control Module (ECM), one or two lanyard release assemblies, three or six 4-liter ECO sample bottles mountedin saddle brackets and fastened with band clamps, stainless steel guard frame with integral lifting bail, and mesh panels formounting ECM, CTD, and other sensors that may be integrated with CTD (e.g., dissolved oxygen, fluorometer, turbidity, etc.).
- CTD mounting brackets and interface cable, auxiliary sensors, and (for real-time operation) SBE 33 Carousel Deck Unit areordered separately.

Two 3-position lanyard release assemblies (for 6 bottles)



SBE 55

ECO WATER SAMPLER

Specifications	
Depth Rating	600 m (with plastic ECM) or 3500 m (with titanium ECM)
Materials	316 stainless steel, titanium, anodized aluminum, plastic
Weight (with 600 m plastic ECM, in air) Note: 3500 m version approximately 7 kg heavier.	Without CTD or bottles – 30 kg With plastic SBE 19plus* & three 4-liter bottles – 51 kg empty With plastic SBE 19plus* & six 4-liter bottles – 60 kg empty, 84 kg full *Note: 19plus and 19plus V2 weights are identical
Winch Cable Compatibility	Single or multi-core armored cable up to 10,000 m long with inner core resistance of 0 - 350 ohms

Field Specifications

The specifications above represent the expected performance of the instrument when deployed in the field. Under controlled circumstances in a lab, we would expect the instrument to outperform these specifications.

We have chosen to display field specifications to give our users a true measure of how Sea-Bird Scientific instruments perform in harsh environments and applications. It is critical to keep this in mind when comparing specifications with instruments from other manufacturers.

Autonomous Operation

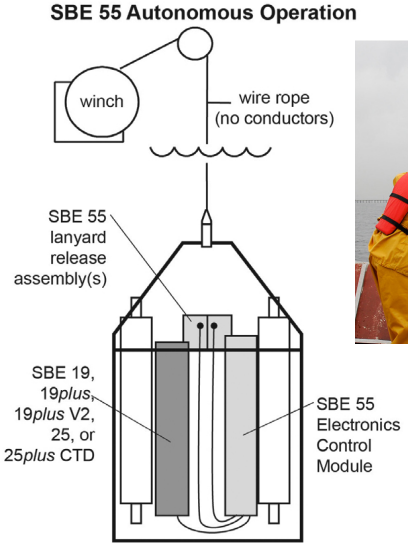
No electromechanical cable required

The Electronics Control Module provides power to and programmable control of the water sampler:

- With a CTD, the SBE 55 monitors pressure data and fires bottles at user-programmed pressures or depths, and records bottle number, firing confirmation, and 5 scans of CTD data for each bottle.
- With no CTD, the SBE 55 fires bottles at user-programmed elapsed times, and records bottle number and firingconfirmation for each bottle.

Data from the CTD and the SBE 55 are uploaded at the end of a cast. Alkaline D-cells provide several months of daily operation (rechargeable Ni-MH batteries available).

SBE 55 Autonomous Operation



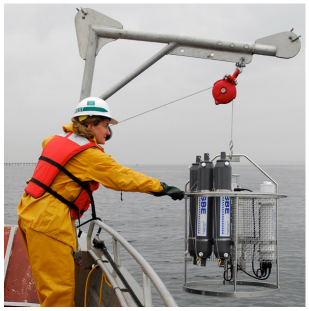


Photo by Paul deRoos

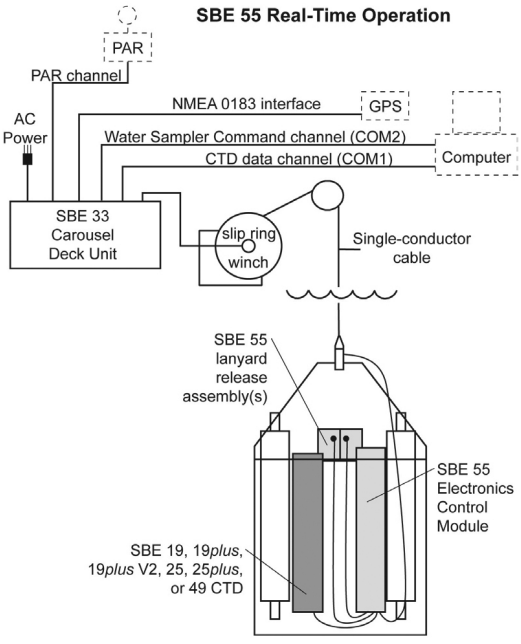
Real-Time Operation

Via electromechanical cable

Connect the winch cable to the Electronics Control Module and connect the SBE 33 Deck Unit to AC power and the winch slip rings to enable real-time CTD data acquisition and water sampler control from your computer keyboard or Deck Unit panel controls:

- With a CTD, the SBE 33 provides power and real-time control to the SBE 55, and power and real-time telemetryfor the CTD and auxiliary sensors.
- With no CTD, the SBE 33 provides power and real-timecontrol to the SBE 55.

SBE 55 Real-Time Operation



SEA-BIRD SCIENTIFIC

seabird.com | sales@seabird.com | +1 425-643-9866