



SEA-BIRD
SCIENTIFIC

SBE45 MicroTSG Thermosalinograph

Product #: 45.1S
USD Price: Contact Sea-Bird



Thermosalinograph designed for shipboard determination of sea surface (pumped-water) conductivity and temperature.

The externally powered SBE 45, typically mounted near the ship's seawater intake, accurately determines sea surface temperature and conductivity from underway vessels. Measured data and derived variables (salinity, sound velocity) are output in real-time in engineering units.

As an option, the SBE 45 connects to an AC-powered interface box near a computer. The interface box provides power and an isolated data interface; it contains a NMEA 0183 port for appending navigation data, and a port for appending the output of an optional remote temperature sensor (SBE 38). The SBE 38, installed at the seawater intake (ideally near the bow), measures sea surface temperature with minimal thermal contamination from the hull.

Shipboard Thermosalinograph

Conductivity and Temperature at user-programmable intervals.

Suitable for Surface Water

Expendable anti-foulant device for bio-fouling protection. Sensor assembly easily removed for cleaning.

Installation Options

Optional interface box for appending navigation data and remote temperature sensor (SBE 38) data.

Specifications

Conductivity Accuracy:	± 0.0003 S/m
Conductivity Measurement Range:	0 - 7 S/m
Conductivity resolution:	0.00001 S/m
Conductivity Typical Stability:	0.0003 S/m per month
Flow Rate:	10 - 30 ml/sec (0.16 to 0.48 gal/min)
Material:	PVC housing
Operating Pressure:	34.5 decibars (50 psi) maximum
Power Consumption:	Acquisition: 34 mA at 8 VDC; 30 mA at 12-30 VDC
Power input:	8 - 30 VDC
Sample Interval:	1-sec to 9-hour intervals
Temperature Accuracy:	± 0.002 °C
Temperature Range:	-5 to +35 °C
Temperature Resolution:	0.0001 °C

Temperature Stability:

0.0002 °C per month

Weight:

4.6 kg