

Sea-Bird Introduces New Instrument

Sea-Bird started 2002 with the introduction of another new instrument:

SBE 50 Digital Oceanographic Pressure Sensor is a high-accuracy (0.1% of full scale range), high-resolution (16 Hz sampling) pressure sensor, for towed vehicle, ROV, AUV, or other autonomous profiling applications at depths up to 7000 meters. The SBE 50's pressure sensor (offered in seven full scale ranges from 20 to 7000 dbars) is the superior, micro-machined, silicon strain-gauge recently developed by Druck, Inc.

The SBE 50 is an easy-to-use, light (0.7 kg), compact instrument ruggedly made of titanium and other low-maintenance (plastic) materials; it is well suited to even the smallest vehicle. Commands sent to the SBE 50 provide status display, data acquisition setup, and diagnostic tests. The SBE 50 must be externally powered, and its RS-232C data (and/or optional 0 - 5 volt output) logged or telemetered by the vehicle to which it is mounted. The SBE 50 does not support auxiliary sensor inputs.

The SBE 50 outputs:

- Raw pressure and pressure temperature values, **or**
- Data in ASCII engineering units (pressure in decibars or psia, or depth in meters or feet) — pressure is calculated using calibration coefficients stored in EEPROM; depth is calculated from pressure, based on user-selection of salt or fresh water and user-input latitude.

The SBE 50 is supplied with titanium housing and XSG I/O bulkhead connector (optional MCBH Micro connector available). The optional Voltage Output interface provides 0 - 5 volt output proportional to pressure or depth, in addition to the RS-232C output.

Enhanced Capabilities for SBE 45 MicroTSG

Sea-Bird has completed the design of a NMEA Interface Box for the SBE 45. With the NMEA Interface Box, users can now add data from a NMEA navigation device and an SBE 38 remote temperature sensor to the thermosalinograph data stream. And, using our updated SEASAVE software, the entire real-time data stream from the NMEA Interface Box can be viewed and plotted. The SBE 45 now provides a complete thermosalinograph system in a compact form. (Note: For applications requiring internal memory or A/D channels for auxiliary sensors, order the SBE 21 thermosalinograph instead of the SBE 45.)

2001 a Record Year in Sales

Sea-Bird closed out our 2001 fiscal year with a record \$14,000,000 in sales. This growth has fueled expansion of our staff and facilities, including an additional calibration lab that opened in May 2002.



Software and Data Analysis

Updates to SEASOFT-Win32

SBE Data Processing now includes a **Beta version** of the **SeaPlot** module, previously available only in our DOS software. SeaPlot can plot C, T, and P, as well as derived variables and data from auxiliary sensors, from any converted .cnv data file. SeaPlot plots up to 5 variables on one plot, with a single X axis and up to 4 Y axes or a single Y axis and up to 4 X axes, using linear or log scales. Plots can be sent to a printer, saved to the clipboard for insertion in another program (such as Microsoft Word), or saved as graphic files in bitmap, metafile, or JPEG format. Future enhancements to SeaPlot (scheduled for early 2003) include multi-file overlay and waterfall plots, and density contours on TS plots.

Also added to SBE Data Processing was **SeacalcW**, a seawater calculator that computes a number of derived variables — depth, sigma-t, sigma-theta, sigma-ref, potential temperature, sound velocity, specific volume anomaly, and oxygen saturation — from one user-input scan of temperature, pressure, conductivity (or salinity), etc.

With the release of SeaPlot and SeacalcW, Sea-Bird has completed the conversion and enhancement of our DOS-based SEASOFT software package to a Win 95/98/NT/2000/XP platform. The Windows software provides much more flexibility and ease-in-use than the DOS software, and includes extensive Help files. Future enhancements and support for new instruments will be added to the Windows package only, but the DOS software will still be shipped and will remain available on our website for downloading.

Release of SEASOFT for Waves - Win32

Earlier this year Sea-Bird introduced **SeatermW**, a Windows program for the SBE 26 SEAGAUGE Wave and Tide Recorder. SeatermW, the first module in our development of SEASOFT for Waves - Win32, provides pre-deployment planning, communication with the SBE 26 to program for deployment, uploading of raw data from the SBE 26, and separation of the raw data into wave and tide files. SeatermW takes the place of the WDisp, Plan26, and Term26 modules in SEASOFT for Waves - DOS. Wave and tide files created by SeatermW can still be processed by the remaining DOS processing modules; those modules will be available in a Windows program in early 2003.

Training

Our training classes continue to **fill up rapidly** (January 2003 class is already almost full). The curriculum covers profiling instruments (days 1-3), and moored instruments, thermosalinographs, and wave and tide recorders (day 4). The course syllabus and course handouts are available on our website.

Website Tips

Did you know that in the last year or two we've added to the website:

- Current version of all product manuals
- Product configuration options and accessories, listing standard features and available options for each product, as well as the Sea-Bird part numbers
- MSDS sheets for items such as anti-foul cylinders, lubricants, and batteries

An updated copy of the entire website is placed on our FTP site every month for easy downloading. So, you can download the website to take on your next cruise for at-your-fingertips technical advice. Slow computer connection? Contact us, and we'll send the latest version of the website and our software, on CD-ROM.



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