The SoundBar 2 Digital Bar Checker is a specific configuration of our world-leading miniSVS product, allowing you to quickly and safely collect sound velocity profile data for the purpose of calibrating echo sounders. Simply lower the probe through the water column to get profile and mean sound velocity data. This simple process removes the need for the difficult and sometimes dangerous standard bar check procedure, and you can be confident that with the most accurate sound velocity sensor in the world, your calibration will be as good as it can be.

**Sensors**
The SoundBar 2 is fitted with Valeport’s digital time of flight sound velocity sensor and a strain gauge pressure transducer.

**Sound Velocity**
- Range: 1375 - 1900 m/s
- Resolution: 0.001 m/s
- Accuracy: ±0.02 m/s

**Pressure**
- Range: 5 or 10 Bar (50 or 100m)
- Resolution: 0.005% range
- Accuracy: ±0.05% range

**Data Acquisition**

**Acoustic**
- Frequency: 2.5 MHz
- Sample Period: Single pulse, maximum time of flight 145µs.
- Sample Modes: Continuous or pressure triggered
- Output rate: 1Hz, 2Hz, 4Hz or 8Hz raw data continuous.
- Pressure triggered data at 8Hz maximum.
- Memory: 128 kbytes (over 10,000 data points)

**Communications**
- Output: RS232 output from display
- Protocol: 2400 to 38400 baud 8 data bits, 1 stop bit, no parity, no flow control

**Emulation**
- AML SV Smart Sensor
- SV/P16, SV/Plus
- Odom Digibar Pro
- NMEA
- Hypack
- + others

**Physical Sensor**
- Housing: Acetal housing, polycarbonate, titanium & carbon composite transducer assembly.
- Max Depth: 100m, dependent on pressure sensor range
- Size: 40mm diameter by 363mm length
- Weight: Air, 1.0kg. Water, 0.5kg

**Cable**
- Type: Polyurethane sheathed, kevlar strain member (100kg breaking strain)
- Length: Standard 20m Maximum 100m

**Control Display Unit (CDU)**
- Size: 244 x 163 x 94mm
- Weight: 2kg
- Protection: IP67 (10 secs @ 0.3m)
- Shipping: 52 x 46 x 23cm, 11kg

**Software**
The system is supplied with CDUExpress Windows based PC software, for data extraction and display. CDUExpress is license free.

**Ordering**
0652014 SoundBar 2 System
- Supplied with:
  - Instrument with sound velocity & pressure sensors (50dBar unless specified)
  - 20m Signal cable on cable carrier
  - CDU with batteries, 12V DC power lead and RS232 output lead
  - Operating Manual
  - Transit Case

**Note:** The sensor used in the SoundBar 2 System is also available for separate purchase as the miniSVS. The Acetal housing is rated to a maximum depth of 500m, and pressure sensors suitable for this operating depth are available. A 6000m titanium version of the miniSVS is also available.

As part of our policy of continuing development, we reserve the right to alter at any time, without notice, all specifications, designs, prices and conditions of supply of all equipment.

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