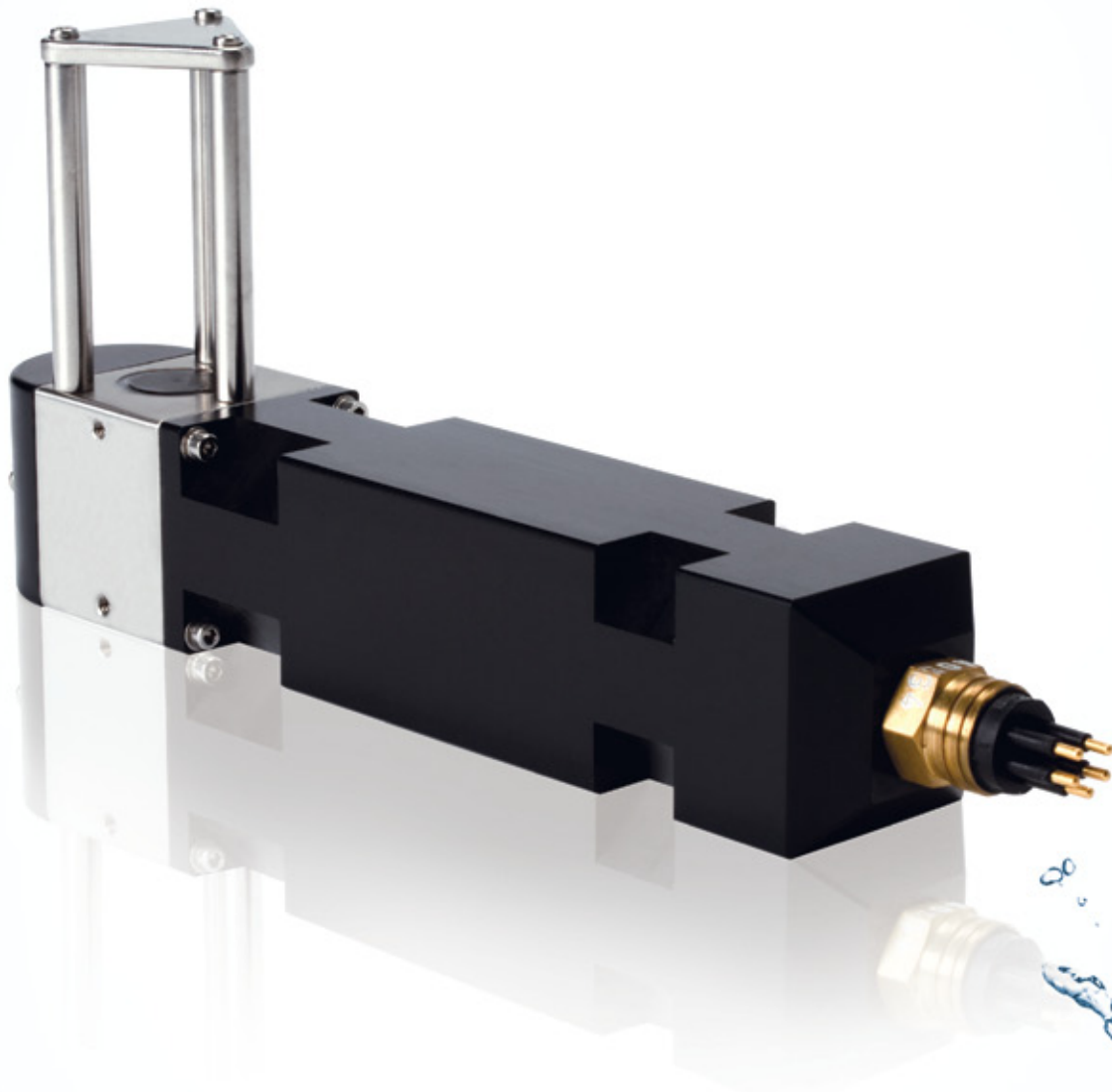


DIGIBAR V™

DIGITAL SOUND SPEED METER



 **TELEDYNE**
ODOM HYDROGRAPHIC
A Teledyne Technologies Company

DIGIBAR V™

DIGITAL SOUND SPEED METER

The Digibar V was designed from the very beginning to provide accurate real-time sound velocity information to your multibeam system or other acoustic instrument where knowledge of the speed of sound in water is required. The choice of interface, output format, update rate, and baud rates are all adjustable to suit your application. Digital filtering techniques applied to the time of flight derived sound velocity, improves the quality of the data output minimizing false readings. The compact unit is easy to install utilizing the tapped holes in the stainless steel head module and the supplied clamping system. Connection is via one standard underwater cable that supplies both power to the instrument and returns sound velocity data to the topside junction box. The choice of connecting to the junction box using either the RS-232 output or the USB port offers even more flexibility.

GENERAL SPECIFICATIONS

PROBE

Body Dimensions

- 22.5 cm in length
- 4.5 cm square
- Probe Body Material, Delrin
- Connector: Subconn

Sounding Chamber

- Path Length – 63.5 mm
- Head Material – 316 Stainless
- Spacers – 316 Stainless
- Reflector Plate – 316 Stainless
- Acoustic Frequency – 2 MHz

Communications

- RS232, 19.2 k Baud (probe to J-Box)

Temperature Range (operation)

- 1° C to 45° C (typical, other ranges available)

Velocity Range

- 1400 – 1600 m/sec

Sample Rate

- > 100 Hz

Output Rate

- Selectable up to 10 Hz

Output Formats

- Industry Standards

Resolution

- 0.1 m/sec

Accuracy

- ± 0.2 m/sec

Submersion Depth

- 50 m max.

DBV J-BOX

Communications

- RS232 serial at 9600, and 19.2 k Baud (2 ports)
- USB (1 port)

Power

- USB 5VDC, <3 Watts, PC port or external USB power supply



► Digibar V with Junction Box