

The **ONLY CHOICE** for reliable measurements of sound velocity in liquids.

SV-2000 Smart Sensor

The SV 2000 Smart Sensor is a low cost, wide range instrument designed to measure sound velocity in a multitude of liquids. This highly adaptive sensor is ideal for integration into existing data collection platforms or OEM equipment. Connect it directly to a PC or combine it with an AML Smart View hand-held display and hand hauled profiles can be conducted in real-time. Its small size, extremely fast response time and high sampling rate make the sensor ideal for fast profiles in boreholes.

Each sensor has internal calibration coefficients and outputs real-time data to allow a "plug and play" environment. The optional addressable features provide for daisy chaining with other sensors allowing the user to create their own system. The optional pressure sensor allows the SV 2000 Smart Sensor to produce real time profiles without monitoring cable lengths or adding other external sensors.

Sensors

SOUND VELOCITY

- "Time of Flight" technology
- 500 to 2000 m/s measuring range
- ± 2 m/s accuracy (± 0.25 m/s in water)
- 0.2 m/s resolution

OPTIONAL PRESSURE

- Semiconductor strain gauge (temperature compensated)
- Available ranges: 0- 10, 20, 50, 100, 200, 500 dbars
- Accuracy: $\pm 0.05\%$ full scale
- Resolution: 0.01 dbar

Electrical

- 35 samples per second maximum
- RS-232 ASCII communications, from 2,400 to 38,400 autobaud
- Optional RS-485 or TTL

Power

- 90 mA sampling current (100 mA with pressure)
- External 8 – 16 Vdc (12 Vdc nominal)
- Optional power configurations available upon request

Mechanical

- Weight: 515 grams (1.14 lbs) in air
177 grams (0.4 lbs) in water
- Dimensions: 45.7 mm (1.8") \varnothing x 315 mm (12.4")
- Construction: Acetal endcap and housing rated to 500 meters.
Optional: Type 316 stainless steel housing rated to 4,500 meters.
Optional: Titanium housing rated to 10,000 meters.
- Connector: IMPULSE Miniature Wet Pluggable™ Series
- Environment: Operating: -20°C to 50°C
Storage: -40°C to 70°C



Instrumentation
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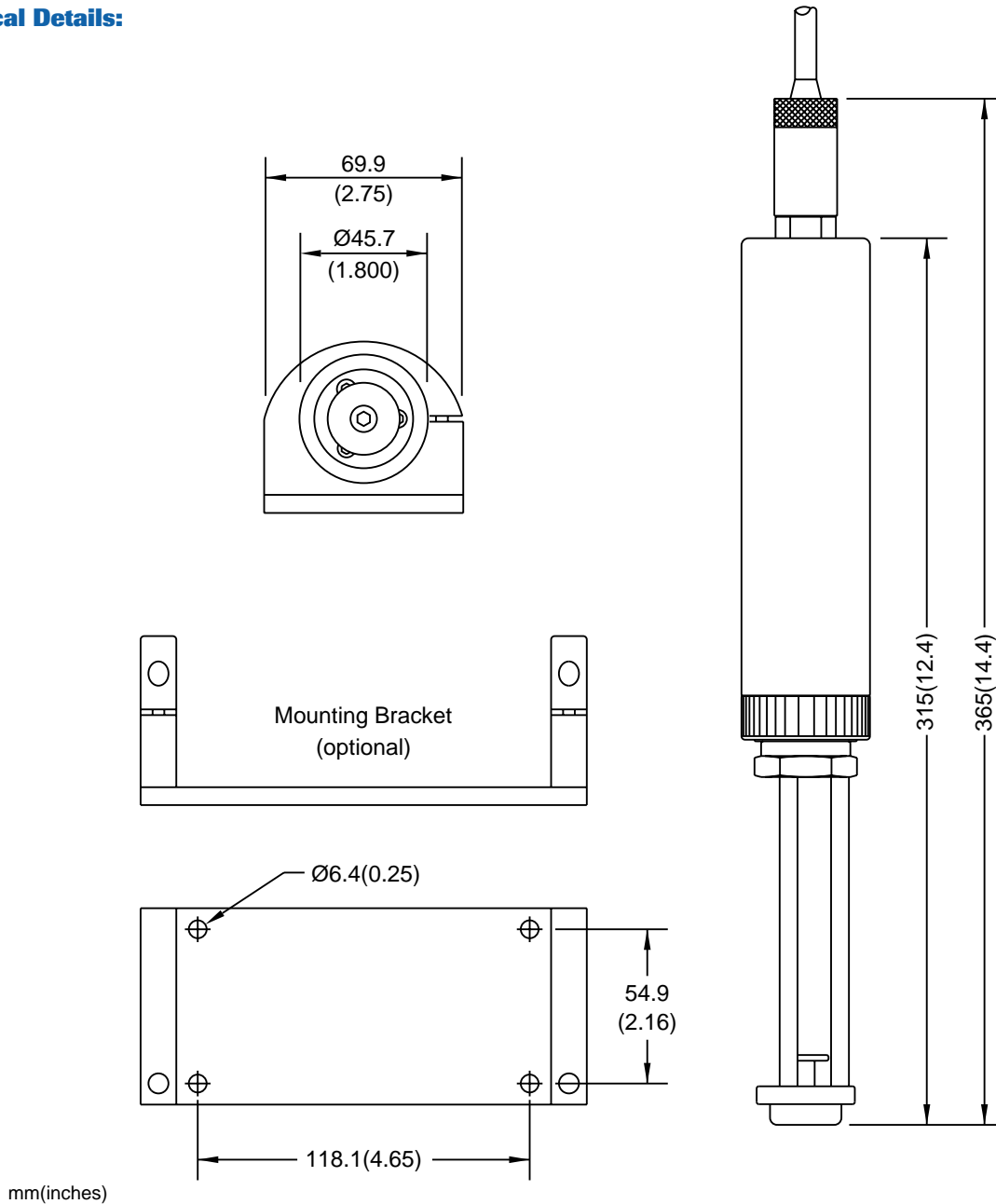
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Accessories and Software

See Accessories Data Sheet for available options and software.

Smart Talk Data Logging Software is included at no charge with every sensor.

Mechanical Details:



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Head Office

2071 Malview Avenue
Sidney, B.C. Canada V8L 5X6
Phone: 250 656 0771
Fax: 250 655 3655
1 800 663 8721 (Canada & USA)
info@AppliedMicrosystems.com