

Minos SVP

The Industry's Only SV Profiler with All Field Swappable Sensors

The Minos SVP is the only profiler on the market which can be fitted entirely with Xchange sensors, meaning that all sensors can be field-swapped. The instrument never needs to return to the factory for recalibration purposes.

The Minos SVP was specifically designed for ocean professionals completing vertical profiles from small launches or boats. The Minos SVP is roughly half the size of Applied Microsystems' SV Plus v2, making handling easier in small spaces. In addition, the instrument includes an LED status light which provides visual feedback on logging status and battery strength.

Like all Applied Microsystems sound velocimeters, the Minos SVP directly measures the time-of-flight of an acoustic ping. Time-of-flight measurement technology is between 5 and 10x more accurate than traditional CTD based sound velocity equations such as Chen & Millero or Del Grosso.



Key Features:

- *Sound Velocity:* Time-of-Flight, ± 0.05 m/s (accuracy)
- *Pressure:* Temperature Compensated Strain Gauge, $\pm 0.05\%$ FS (accuracy)
- *Small Size:* half the size of the SV Plus v2, 2.98" diameter, 21.8" length, 2.22 Kg in air
- *Power:* rechargeable Lithium-Ion battery pack provides approximately 30 hours of continuous sampling
- *Designed for Profiling:* includes shackle point and stainless steel protective sensor cage
- *LED Indicator:* flashing light indicates when instrument is logging and when battery is low
- *Temperature:* optional Precision Aged Thermistor, $\pm 0.005^{\circ}\text{C}$ (accuracy)
- *SV•Xchange™:* optional SV•Xchange™, the industry's only field-swappable sound velocity sensor
- *P•Xchange™:* optional P•Xchange™, the industry's only field-swappable pressure sensor

Xchange

Field Swappable Sensors

Xchange is the industry's only field-swappable sensor option. Any Xchange sensor can be connected to any Xchange enabled instrument - when you want, where you want - without compromising calibration accuracy.

Xchange offerings include SV•Xchange™ (available April 2008) and P•Xchange™ (available April 2009).

Key benefits include increased instrument field time, lower cost of ownership, greater convenience and increased flexibility.



Electrical:

- LED light indicates if the battery is low and when instrument is operating
- Gigabyte non-volatile memory (expandable)
- Up to 25 scans per second
- Real time clock
- 6.5 to 26 VDC (external)
- Auto detect RS232 or RS485
- Optional additional channels (2 analog or 1 digital)
- Auto shut-down in low battery conditions

Sampling Modes:

- Continuous; defined increments of time or pressure; on request

Power:

- Rechargeable Lithium-Ion battery pack

Mechanical:

- Housing & Endcap: delrin to 1000 m or titanium to 6000 m
- Stainless steel shackle point and sensor protection cage
- Size: 75.7 mm / 2.98" (diameter) x 553.7 mm / 21.8" (end-to-end)
- Connectors: Subconn Micro 8 wet pluggable, Female
- Environmental: Storage, -20°C to 60°C; Usage, -20°C to 45°C

Accessories:

- Instrument suspension bar
- Instrument protection frame
- Field spares kit

Ordering Code:

- PDC-A1800

**specifications subject to change without notice*

Range

Precision

Accuracy

Response

Resolution

Standard Sensors	Sound Velocity (Composite)	1400 to 1600 m/s	+/-0.03 m/s	+/-0.05 m/s	47 microseconds	0.015 m/s
	Pressure (Strain Gauge)	Various to 6000 m	+/-0.03%FS	+/-0.05%FS	10 milliseconds	0.005%FS
Optional Upgrades	SV•Xchange™	1375 to 1625 m/s	+/-0.006 m/s	+/-0.025 m/s	47 microseconds	0.001 m/s
	P•Xchange™	Various to 6000 m	+/-0.003%FS	+/-0.05%FS (standard) +/-0.01%FS (upgrade)	10 milliseconds	0.002%FS
	Temperature	-2 to 32°C	+/-0.003°C	+/-0.005°C	100 milliseconds	0.001°C

APPLIED MICROSYSTEMS

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