Sea*PROFILER* ADCP

Direct-Reading

300 kHz / 600 kHz / 1200 kHz

The Rowe Technologies ***SeaPROFILER*** product family of direct-reading Acoustic Doppler Current Profilers (ADCPs) represent the industry state of the art in acoustic Doppler technology. The compact form factor, powerful electronics and robust signal processing, provide a versatile platform capable of producing precise current profile measurements over extended ranges.

Each unit in the family leverage a core, common set of electronics in a flexible form factor. This combined with multiple packaging options [either horizontal or vertical electronics placement] provides for a cost-effective and extremely capable instrument to address a wide variety of oceanographic applications.

The ***SeaPROFILER*** ADCP's are well suited for real-time current profiling applications such as coastal monitoring, where a bottom- mounted or surface-deployed configuration is used with a hard-wired communications and power source. The ability for the ***SeaPROFILER*** to also track the bottom allows it to be used in moving boat applications as well.

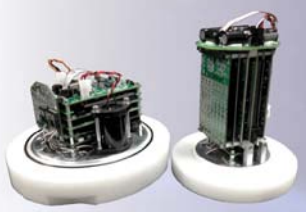
Rowe Technologies, Inc.
www.rowetechinc.com
sales@rowetechinc.com
Tel: +1 858 842 3020

Product Features:

- Multi-Use Configuration -- 3-Axis Current Profile and Bottom Track or Water Track Velocity Measurements.
- User-Programmable Acoustic Transmission -- Broad Band, Narrow Band, and Pulse-to-Pulse Coherent Technologies.
- User-Selectable Signal Processing Options Optimize Acquisition Parameters for Precise, High-Accuracy Measurements.
- Temperature Sensor and Flux Gate Compass with Pitch and Roll Sensor
- ROWE's Windows™-Based Pulse Software Included for Data Acquisition, Display and Export.

Product Options:

- External Battery Pressure Housing Options Allow for Extended Deployments.
- Optional Pressure Sensor.



Electronics Orientation

Horizontal -- or -- Vertical

SeaPROFILER Specifications

Single Frequency (nominal):	*300KHz*	*600kHz*	*600kHz*	*1200KHz*
Piston Ceramic Size:	3 in	3 in	2 in	2 in
Beam widths [2 way]:	2.70°	2.00°	2.00°	1.01°
Beam Spacing:	4 beams inclined 20°			
Velocity Range:	+/- 20 m/s Max; +/- 5 m/s Typical			
Resolution:	0.01 cm/s			
Number of Cells:	up to 200			
Cell Size:	2.0 cm minimum			
Current Profiling:				
Maximum Range:				
Narrow Band:	150 m	75 m	70 m	30 m
Broad Band:	100 m	50 m	45 m	20 m
Long-Term Accuracy (High Accuracy Option):	± 0.70%, ± 2mm/s	± 0.25%, ± 2mm/s	± 0.50%, ± 2mm/s	± 0.25%, ± 2mm/s
Long-Term Accuracy (Low Accuracy Option):	+/-1.0%, +/- 2 mm/s			
BB Single-Ping Precision:	3.5 cm/s @ 4 m cell depth	3.5 cm/s @ 2 m cell depth		3.5 cm/s @ 1 m cell depth
NB Single-Ping Precision:	20 cm/s @4 m cell depth	20 cm/s @2 m cell depth		20 cm/s @1 m cell depth
Data Output Rate:	1-2 Hz typical; 10 Hz max			
Bottom Tracking:				
Maximum Range:	300 m	130 m	120 m	50 m
Maximum Bottom Track Speed:	15 m/s			
Long-Term Accuracy (High Accuracy):	± 0.70%, ± 2 mm/s	± 0.25%, ±2 mm/s	± 0.50%, ±2 mm/s	± 0.25%, ±2 mm/s
Long-Term Accuracy (Low Accuracy):	+/-1.0%, +/- 2 mm/s			
Single-Ping Precision:	± 0.6 cm/sec @ 3 m/sec	± 0.5 cm/sec @ 3 m/sec	± 0.5 cm/sec @ 3 m/sec	± 0.4 cm/sec @ 3 m/sec
Resolution:				
Sensors:				
Compass: Range/Accuracy/Resolution:	0-360° / 1°RMS / 0.01°			
Pitch/Roll: Range/Accuracy/Resolution:	Roll +/- 180° / Pitch +/- 90° / <1°RMS /0.01°			
Water Temp: Range/Accuracy/Resolution:	-5° - 70° C / +/- 0.15°C			
Pressure: Range/Accuracy:	Selectable / +/- 10% Range			
Materials Options:	Acetal / Aluminum / Titanium			
Input Power:				
Voltage Range (Ext DC Input):	12 - 36 VDC			
Average Power (5% duty cycle) / Peak Current:	23 W typical	30 W typical	30 W typical	23 W typical
Output Data:				
Communications:	RS-485, RS232, 100Base T /Ethernet (self-contained only)			
Internal Recording:	32 GByte			
Environmental:				
Temperature:	-5° to 45° C (Operating), -30°C to 60° C (Storage)			
Depth Rating:	50m, 300 m, 3000m, and 6000m (600 kHz)			

Specifications may be subject to change at any time in the future.

***** In Development***