SeaWAVE ADCP

SeaWAVE
300 kHz / 600 kHz / 1200 kHz

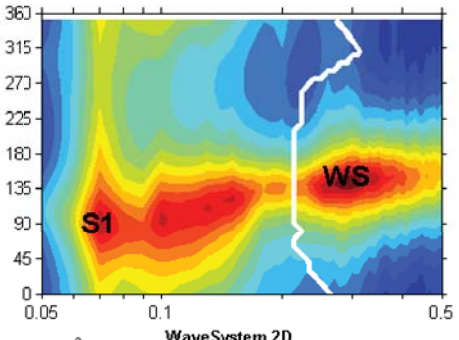
The Rowe Technologies ***SeaWAVE*** product family of Acoustic Doppler Current Profilers (ADCPs) represent the industry's state of the art in acoustic Doppler technology. The ***SeaWAVE*** ADCP measures wave direction and wave height while also providing full current profile data – even throughout the wave burst interval.

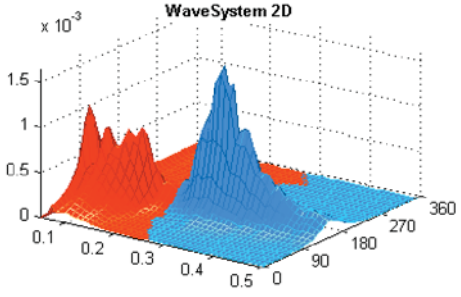
The ***SeaWAVE*** simultaneously measures wave spectra, wave direction, and complete current profiles for every ping. The ***SeaWAVE*** can also measure current profiles during the wave burst interval, so you can get full velocity profile coverage during your deployment.

The ***SeaWAVE*** uses both a vertical beam and a pressure sensor to accurately measure range to the surface. The vertical beam functions similar to an inverted echo sounder providing more accurate, higher frequency wave measurements.

The ***SeaWAVE*** wave measurement ADCPs are available in both the direct-read and self-contained configuration.

WaveForce™ Technologies [www.waveforcetechnologies.com], partnered with Rowe Technologies, Inc., offers ocean wave data analysis software packages -- both a real-time and post-processing software suite that interfaces seamlessly with the ***SeaWAVE*** ADCP outputs.





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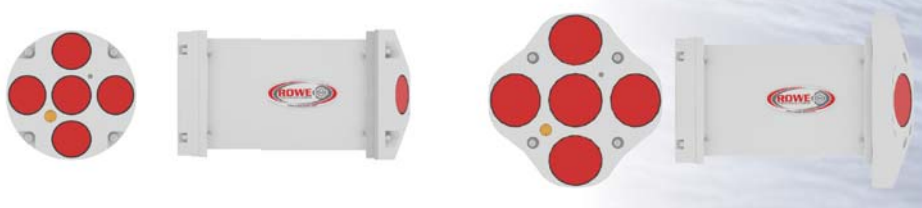
Product Features:

- Large Aperture Vertical Beam – The SeaWAVE Uses a Full-Size Transducer for its Fifth Vertical Beam, -- Thus Providing a Narrower Radiation Pattern for More Accurate Measurements of:
  - o Surface Range.
  - o Vertical Water Profile.
- Data Storage – SeaWAVE Accommodates up to 32GB of Internal Memory, Storing Raw Current Profile Data for Post Processing.
- Data Interfaces – In Addition to the Common Serial Interfaces that ***SeaWAVE*** Supports (RS232,RS485, RS422), It Also Supports a Separate Ethernet Interface which Allows a High Speed Data Download.
- Configuration to Support Both Direct-Reading and Self-Contained.
- Applications in the Same Package. In Addition to the Common Serial Interfaces that ***SeaWAVE*** Supports. (RS232,RS485, RS422), It Also Supports a Separate Ethernet Interface Which Allows a High Speed Data Download.
- ***WaveForce***™ Technologies Offers Both a Real-Time SW Package -- [***AutoWaves***] and Two Post Processing SW Packages -- [***Wavector***, and ***XWaves***].

AutoWaves Wavector XWaves

Optional Product Features:

- Self-Contained DF ADCPs Offer an External Battery Pressure Housing.



SeaWAVE Specifications

Single Frequency (nominal):	***600kHz***	***600kHz***	***1200KHz***
Piston Ceramic Size:	3 in	2 in	2 in
Beam widths [2 way]:	2.00°	2.00°	1.01°
Beam Spacing:	4 beams In Janus (configuration inclined 20)° and 5th beam is vertical		
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:			
Broad Band:	50 m	45 m	20 m
Long-Term Accuracy (High Accuracy Option):	± 0.25%, ± 2mm/s	± 0.50%, ± 2mm/s	± 0.25%, ± 2mm/s
Long-Term Accuracy (Low Accuracy Option):			
BB Single-Ping Precision:	3.5 cm/s @ 2 m cell depth		3.5 cm/s @ 1 m cell depth
Data Output Rate:			
Sensors:			
Compass: Range/Accuracy/Resolution:	0-360º / 1ºRMS / 0.01º		
Pitch/Roll: Range/Accuracy/Resolution:	Roll +/- 180º / Pitch +/- 90º / <1ºRMS /0.01º		
Water Temp: Range/Accuracy/Resolution:	-5º - 70º C / +/- 0.15ºC		
Pressure: Range/Accuracy:	Selectable / +/- 10% Range		
Materials Options:	Acetal		
Input Power:			
Voltage Range (Ext DC Input):			
Average Power (5% duty cycle) / Peak Current:	30 W typical	30 W typical	23 W typical
Output Data:			
Communications:	RS-485, RS232, 100Base T /Ethernet (self-contained only)		
Internal Recording:	32 Gbytes		
Environmental:			
Temperature:	-5º to 45º C (Operating), -30ºC to 60º C (Storage)		
Depth Rating:	300 m,		
Waves:			
Wave Height:	H_S, 1% of measured value		
Period:	T_P, 1-100 s		
Direction:	Dp, accuracy 2 deg		
Sample Rate:	2 Hz typical, including vertical beam		

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