FSI 3DWAVE

3D-Wave Meter

Wave Direction, Height, and 3D Current Data in a Single Instrument

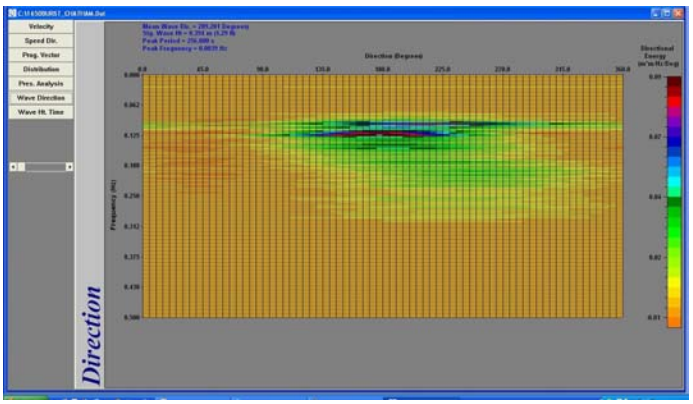
The Falmouth Scientific, Inc. (FSI) 3D-Wave Meter provides wave direction, wave height, and other wave statistics by combining a high-accuracy acoustic current meter with a high-accuracy state-of-the-art micro-machined silicon pressure sensor. The 3D-Wave Meter can be deployed in a multiple-mode format to allow periodic burst sampling of wave data as well as long-term averaging. Internal processing of spectral data allows simplified telemetry of wave data for near-real-time wave reporting. The 3D-Wave comes complete with FSI's Windows-based ACMPro software for system configuration and data download, as well as WavePost software for graphics display and advanced post-processing.

Contact FSI for pricing or to discuss telemetry options and specific requirements of your application.

FSI's 3D-Wave provides Wave Height and Direction

BENEFITS

- High-accuracy wave data provided by fast sampling (1 to 5Hz) and precise pressure sensor (+/-0.01% FS)
- Internal processing for near-real-time output of wave data
- Internal battery pack and large memory (32 or 64MB) provide long deployment capability
- 3-axis velocity measurement for directional wave calculation
- Optional CTD and inputs from water quality sensors provide additional environmental data



Wave Directional Energy provided by WavePost Software

SPECIFICATIONS

Sensors

Parameter	Type	Range	Accuracy	Resolution
Pressure (Wave Height)	Silicon Micro-Machined	0-50 psia (23m max depth)	±0.01% full scale	0.145 10^{-3}
Direction	3 Axis Fluxgate	0 to 360°	±2.0°	0.01°
Temperature	Thermistor	-2 to 35°C	0.5°C ±0.05°C*	0.01°C
Velocity	Acoustic	0 to 300 cm/s	±2% of Reading max± 1 cm/s	0.01 cm/s
Tilt	2 Axis	0 to 45°	±0.5°	0.01°

*Optional

Optional CTD

	Range	Accuracy	Resolution	Stability
Conductivity (S/m)	0 to 7.0	±0.002	.0001	±0.005
Temperature (Celsius)	-5° to 32° ITS-90	±0.03°	.001°	±0.005°
Pressure (dBar)	0 to 200 dBar 0 to 2000 dBar	±0.3% full scale	0.01% full scale	±0.01% full scale

Instrument

External Power: 7 to 24 VDC, 35 mA

Battery Power: Alkaline 10 D Cell Welded Pack

Sample Rate: 1, 2, 3, 4, or 5 Hz (Burst)

Vector Averaging Period: 15 Seconds to 1 Hour

Burst Sampling: 15 Seconds to 1 Hour

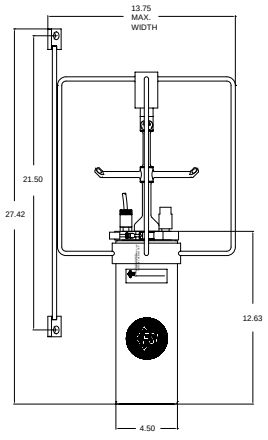
Physical Material: 500 PVC Housing
316 SS Mooring Frame
316 SS Bottom Mount Tripod

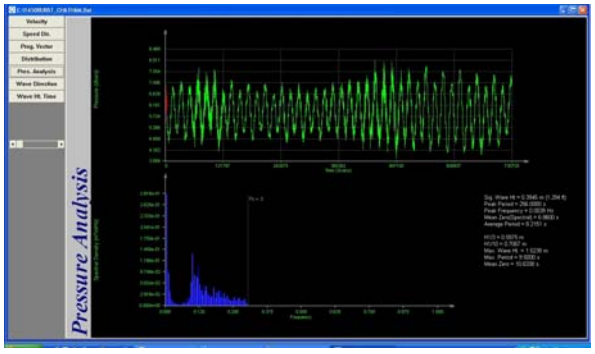
Real Time Clock: Programmable Sampling/Low-power Mode

Input Channels: Two (2) DC Input Channels Available for External Sensor Input, such as Transmissometer, DO, OBS (Regulated 12 VDC Output to Power Other Sensors)

Weight: 3D Wave: Air-13 lbs (5.9 kg) Water-4 lbs (1.81 kg)

Specifications Subject to Change without Notice





Wave Pressure Analysis displayed in WavePost Software

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