

Wave Profiler™



A highly accurate upward-looking instrument for measuring waves

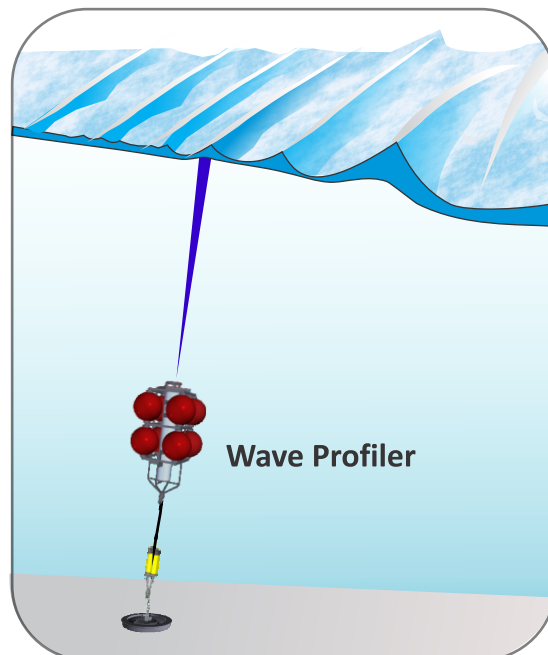
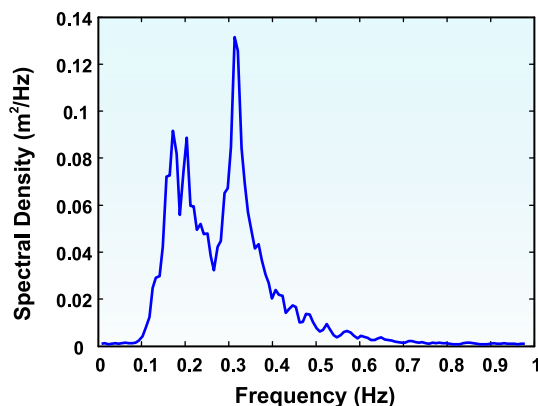
Applications

The ASL Wave Profiler™ is an ideal instrument for very accurate wave measurements for many applications including:

- Offshore Oil Platforms
- Dredging and Sediment Transport
- Research Oceanography
- Fast Ferry Wake
- Bridges and Causeways
- Design of Coastal Structure
- Infra-gravity Waves
- Seasonal Studies

Features

- Allows derivation of standard ocean wave parameters from time series measurements of the acoustic range to the sea surface.
- Ideal for measuring surface gravity waves from depth.
- Provides very linear sensor characteristics eliminating errors due to steep-sided and long swell-waves. Unlike pressure-wave instruments, does not depend on linear wave theory assumptions.



Features (continued)

- Real-time output available through RS-232 or RS-422 digital serial communications
- Offers exceptional data storage capacity allowing measurements at 2 Hz burst or continuous sampling (4 Hz sampling available at short ranges).

Wave ProfilerTM Specifications

UPWARD LOOKING SONAR

	Standard
Operating Frequency	420 kHz
Beam Width	0.9° (center beam to half power point)
Sampling Rate	2 Hz
Duty Cycle	up to 100%
Range	225 m
Precision	± 0.05 m
Resolution	0.01 m
Gain	4 levels

REALTIME CLOCK

Accuracy	± 5 min/year
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DATA STORAGE

Standard	8 GB Compact Flash
Optional	16 GB Compact Flash

POWER

Standard	Provides more than 26 weeks at 2 Hz sampling and 100% duty cycle
Optional	Extended alkaline battery pack or carrier for Lithium battery packs to extend deployment duration.

SIZE

0.17 m diameter x 1.0 m length

SOFTWARE The following Windows-based software is included with the Wave ProfilerTM package:

IPS5Link Communications software to enable setup and download functions.

WaveSoft Allows computation and display of significant wave height, peak period and auto spectra

OPTIONAL FEATURES

Sea Ice Draft Profiling with a high resolution pressure sensor (Ice Profiling SonarTM—IPS).

Extended alkaline battery pack or carrier for Lithium battery packs to extend deployment duration.

Custom versions of the Wave ProfilerTM are also available for Autonomous Underwater Vehicles (AUV).

Both taut line and gimballed bottom mount moorings available.