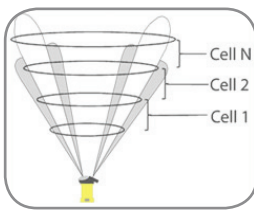




Acoustic Doppler Profiler (ADP[®]) and Mini-ADP[®] Systems

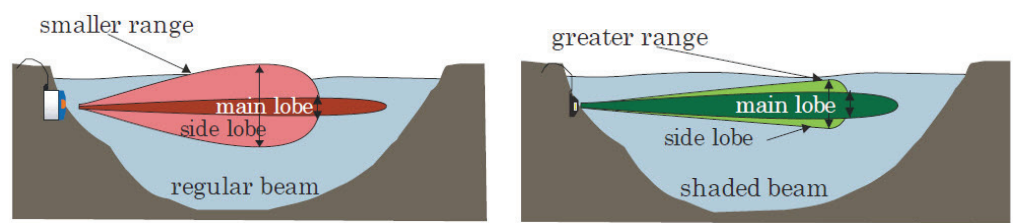
The SonTek Acoustic Doppler Profiler (ADP) systems are proven, capable and versatile instruments that combine current profiling, multi-sensor integration and wave measurement capabilities in a single package.



Whether your application is underway current surveys, long-term moorings, near-shore deployments, benthic studies, wave monitoring, port and harbor monitoring, or river discharge measurement, there is an ADP configuration to suit your needs.

The ADP is a high-performance current profiler that is accurate, reliable and easy to use. The transducers and electronics are designed to minimize side-lobe interference problems that plague other current profilers, allowing the ADP to make measurements closer to the boundary. The reduced side-lobe interference also makes the system particularly effective for horizontal measurement applications, where the SL-ADP has become a staple of port and harbor monitoring applications, and where the ease of access for a system installed on a piling, jetty wall, etc., can be a priority as opposed to using a bottom mounted system.

The 1.5 MHz system is available as a Mini-ADP configuration featuring a small and compact transducer head assembly and a separate electronics and battery housing, allowing for greater flexibility and convenience in mounting and transducer placement.



SonTek-ADP



SonTek-SL ADP



SonTek Mini-ADP

Standard Features:

- 0.250, 0.500, 1.0 and 1.5-MHz models
- Compass and 2-axis tilt sensor
- Temperature sensor
- Profiling ranges up to 180m
- Transducer shading for minimal side-lobes
- Configure up or down-looking based on deployment needs

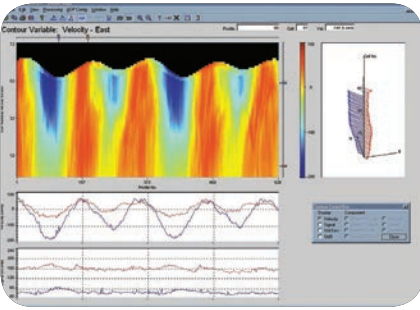
Optional Features:

- Pressure sensor
- Internal recorder
- RS422 output
- Bottom Tracking (1.5 MHz, 1.0 MHz and 0.500 MHz models). Includes CurrentSurveyor and RiverSurveyor software for velocity mapping and discharge measurement, with GPS input
- External battery housing (Standard ADP) or internal batteries (Mini-ADP)
- SonWavePro directional and SonWave non-directional wave packages
- External sensor integration



a xylem brand

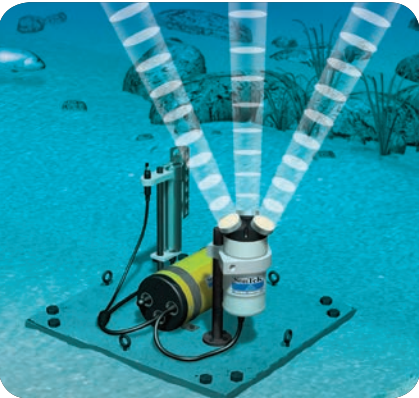
SonTek Acoustic Doppler Profiler Specifications



Example of ViewADP display and analysis program, also available with bottom-tracking, RiverSurveyor and Current Surveyor software also available.



Mooring deployments offer the ultimate flexibility in profiling at specific depths in the water column. Up and downward facing for double the range.



Select bottom-mounted profilers for long-term seafloor studies.

ADP Characteristics				
Frequency	Max. Profiling Range	Min. Cell Size	Min. Blanking Distance	Configurations
1.5 MHz	15-25m	0.25m	0.40m	Mini-ADP
1.0 MHz	25-35m	0.40m	0.7m	Standard ADP
500 KHz	70-120m	1.0m	1.0m	Standard ADP, SL-ADP
250 kHz	160-180m	2.0m	1.5m	Standard ADP, SL-ADP

Velocity Range: +/- 10 m/s

Velocity Resolution: 0.1 cm/sec

Velocity Accuracy: +/- 1% of measured velocity, +/- 0.5 cm/s

Up to 100 range cells

Compass Type: Solid State

Compass Range: 360°

Compass Resolution: Heading, Pitch, Roll - 0.1°

Compass Accuracy: Heading +/- 2°
Pitch, Roll +/- 1°

Temperature Resolution: 0.01°C

Temperature Accuracy: +/- 0.1°C

Input voltage range: 12-24VDC

Typical Power Consumption:
2.0-5.0W operating, less than 1mW sleeping

Working Battery Capacity (using 80% total capacity)

- Standard ADP system: 3 packs 1800 WH
- Mini-ADP system: 2 packs 1200 WH

(optional sensors consume additional power)

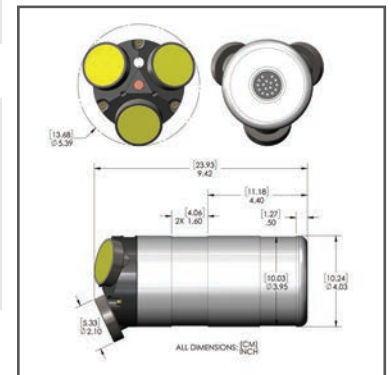
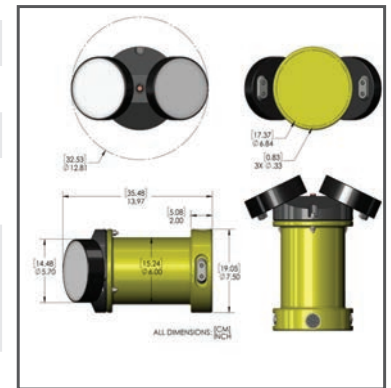
Pressure rating: 500m (pressure sensor dependent)

Operating Temperature: -5 to +40°C

Storage Temperature: -10 to +50°C

Sensor Options:

- Piezoresistive strain gauge, 0.1% accuracy
- RPT frequency pressure sensor, 0.01% accuracy (20m maximum depth)
- SeaBird MicroCat
- OBS Turbidity



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Let's Solve Water

Founded in 1992 and advancing environmental science globally, SonTek manufactures acoustic Doppler instrumentation for water velocity measurement in oceans, rivers, lakes, harbors, canals, estuaries, industrial pipes and laboratories. SonTek's sophisticated and proprietary technology serves as the foundation for some of the industry's most trusted flow data collection systems. SonTek is headquartered in San Diego, California, and is a division of Xylem Inc.

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