



Workhorse H-ADCP

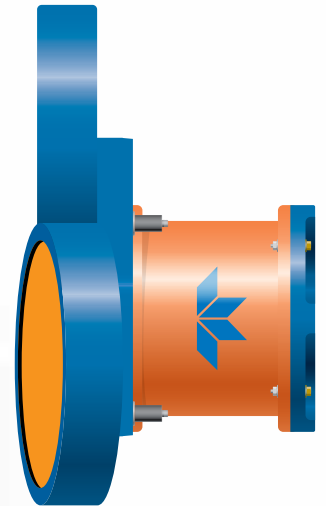
300 kHz LONG-RANGE HORIZONTAL ADCP

Real-time Current Profiling and Waves Measurement in a Single Package

Teledyne RD Instruments' **Horizontal Acoustic Doppler Current Profiler (H-ADCP)** is a monitoring system that "looks" horizontally across a water body, measuring water currents at various locations. The H-ADCP's narrow 1-degree beam, combined with Teledyne RDI's patented Broadband signal processing, provides unparalleled data range, resolution, and quality. The H-ADCP provides a complete measurement of the flow structure at a single depth out to 200 meters. The H-ADCP can also be upgraded to include Teledyne RDI's patented Waves Array. Now a single instrument can provide you with precisely the data you require—when and where you need it most.

The Workhorse H-ADCP is ideal for use:

- **In ports and harbors** for real-time pier-mounted monitoring for vessel navigation and safety
- **In estuaries** for defining complex circulation patterns and lateral mixing
- **On oil platforms,** seismic vessels, and in hydroelectric and tidal power plants



What sets us apart:

- **Narrow Beam:** $<1^\circ$ beam ensures maximum profiling range while reducing the probability of contamination caused by surface and/or seabed reflections.
- **Currents and Waves:** Combined capability in a single package.
- **Increased Data:** The H-ADCP provides users with the capability to measure from 1 to 128 data points, which represents an exponential increase in data quality and accuracy.
- **Superior Data Quality:** Teledyne RDI's three-beam configuration provides a third beam to screen out biased data due to the passage of vessels through the sample volume.
- **Compact 600kHz and 300kHz configurations** available for shorter range applications with wider beam width

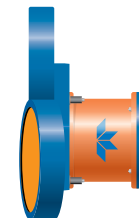


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A Teledyne Technologies Company

Workhorse H-ADCP

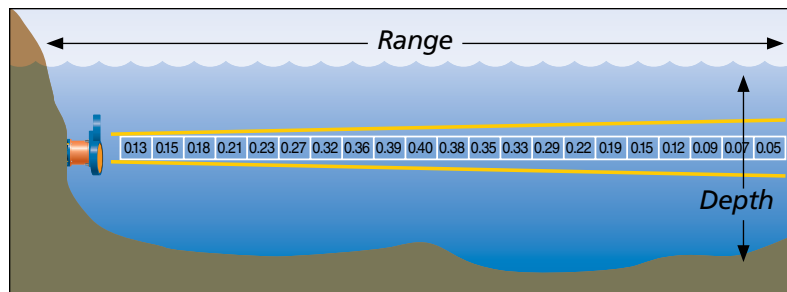
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Technical Specifications

Range	
Typical max. range	250m
Aspect ratio limitation	19/1 (range/total depth) ¹
Profile Parameters	
Velocity accuracy	±0.5% of water velocity relative to H-ADCP ±0.5cm/sec
Velocity resolution	0.1cm/s
Velocity range	±5m/s (default); ±10m/s (maximum)
Number of depth cells	1–128
Error velocity data rejection	Yes; required on a single-ping basis to screen errors from passing vessels
Transducer and Hardware	
Beam width	<1°
Beam angle	20°
Configuration	3-beam, convex
Communications	Serial port is switch-selectable for RS-232 or RS-422, ASCII or binary output at 1200–115,200 baud

¹See illustration below



H-ADCP looks horizontally across a water body, measuring currents at numerous locations as well as directional waves.

Standard Sensors

Temperature (mounted on transducer):

Range: -5° to 45°C
Precision: ±0.4°C
Resolution: 0.01°

Compass (fluxgate type, includes built-in field calibration feature):

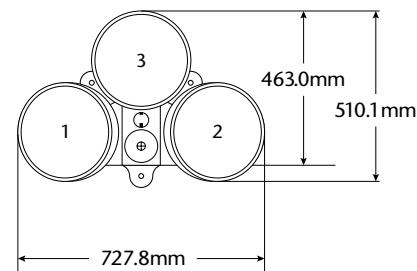
Accuracy: ±2° *
Precision: ±0.5° *
Resolution: 0.01°
Maximum tilt: ±15°

* Note: @ 60° magnetic dip angle. 0.5G total field

Available Options

- Memory: 2 PCMCIA slots, total 4GB
- Pressure sensor
- Directional wave array

Dimensions



Environmental

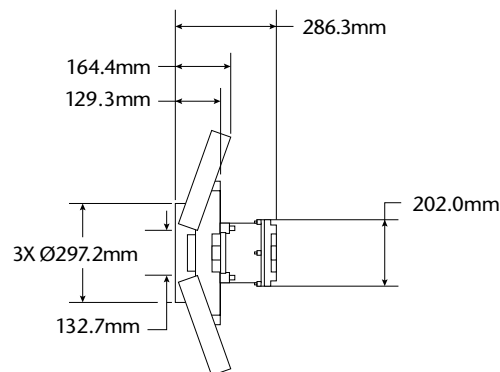
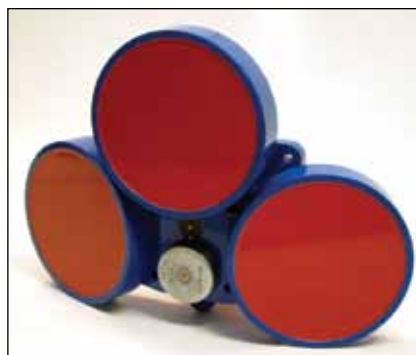
Standard depth rating: 200m
Operating temperature: -5° to 45°C
Storage temperature*: -30° to 75°C
Weight in air: 72.1 kg
Weight in water: 49.0 kg

* Without batteries



Power

DC input: 20-50 VDC



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Free 24/7 emergency support

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Specifications subject to change without notice. ISO 9001:2008 certification applicable to Poway, CA facility only.
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