# StreamPro ADCP

Shallow Streamflow Measurement System

Teledyne RD Instruments' **StreamPro ADCP** (Acoustic Doppler Current Profiler) is the industry standard in streamflow measurement. Built on years of Broadband experience, StreamPro enables a detailed measurement in a matter of minutes—a fraction of the time required using handheld point Doppler, electromagnetic, or mechanical devices. A discharge is obtained in real time and comes with QA/QC checks both during data collection and in post-processing to ensure compliance with organizational standards.

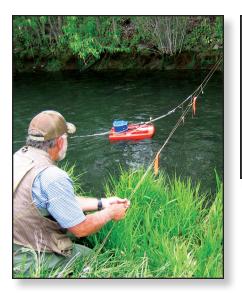


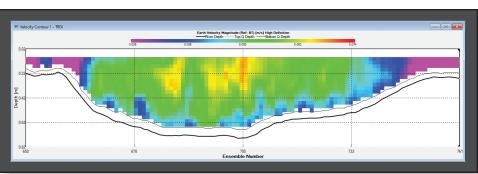
The StreamPro's transducer can be towed from the front or middle of the float, or can be removed and hand-held in the water for applications such as under-ice flow measurements.

## **PRODUCT FEATURES**

- **Solid Acoustics:** 2 MHz operating frequency plus 20-degree beam angle ensures fullest velocity profile across the widest range of depth and sediment conditions.
- **Reduced Disturbance:** Smallest transducer head of any ADCP; reduced flow disturbance and easy use under ice.
- **Long-Range Bottom Tracking:** Reliable up to 7 m, profiling up to 6 m, standard on all systems.
- **Wireless Range:** 200 m long Bluetooth range ensures even short range communications resist dropouts.

- **Configurable:** Minimum cell size 1 cm with up to 30 cells.
- **Stable Floats:** Trimaran-style standard and high-speed options ensure consistent data under variable conditions.
- · GPS option available.
- Flexible Data Format: Compatible with Teledyne RDI's WinRiver II software for data display and processing.
- Low Power: Full day of operation on AA batteries.
- **Affordable:** Surprisingly value-priced to suit your budget.





ADCP	IDEAL FIELD ENVIRONMENT		
StreamPro ADCP	Shallow streams, 10 cm - 6 m		
RiverPro ADCP	Deep streams to shallow rivers, 20 cm - 25 m		
RiverRay ADCP	Shallow to deep rivers, 40 cm - 60 m		

Above right: Sample data from StreamPro in high-precision mode in Cépet, France.

Above: Teledyne RDI's StreamPro ADCP can simply be pulled across the stream as you walk across a bridge, or attached to a tagline to collect real-time data.



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## TECHNICAL SPECIFICATIONS

Water Velocity Profiling	Profiling range	0.1 m <sup>1</sup> to 6 m				
water velocity Fronting	Velocity range	±5 m/s <sup>3</sup>				
	Accuracy	±1% of water velocity relative to ADCP, ±2 mm/s				
	Resolution	1 mm/s				
	Number of cells	1–30				
	Cell size	1 cm to 20 cm				
	Blanking distance	3 cm				
	Data output rate	1 Hz				
Bottom Tracking	Depth range 0.1 m-7 m <sup>2</sup>					
Dottom nacking	Accuracy	±1.0% of bottom velocity relative to ADCP, ±2 mm/s				
	Resolution	1 mm/s				
Depth Measurement	Range 0.1 m-7 m <sup>2</sup>					
	Accuracy	1%4				
	Resolution	1 mm				
Sensors		Temperature	Tilt (pitch and roll)	Compass (heading)		
	Range	-4° to 45°C	±90°	0-360°		
	Accuracy	±0.5°C	±0.3°	±1°		
<b>Operation Modes</b>	Standard profiling (Broadband)					
	High-precison profiling (included, for depths 0.1 m to 1.0 m)					
Transducer	Frequency 2 MHz					
	Configuration	Janus 4 beams at 20° beam angle				
Software (included)	WinRiver II (standard) for moving-boat measurement					
Available Upgrades	• SxS Pro Software for stationary measurement					
		y assessment and reporting • GPS • Riverboat SP or High-Speed Riverboat (HSRB)				
Communications	Bluetooth wireless range 200 m <sup>5</sup>					
	Baud rates: 115,200 bps					
Construction	Cast polyurethane with stainless hardware					
Power	Voltage 10.5 –18 VDC (8 AA batteries, alkaline or rechargeable NiMH)					
	Battery capacity	7.5 hours continuous with 8 AA alkaline batteries; 12.75 hours continuous with 8 AA NiMH rechargeable batteries				
Environmental	Operating temperature:					
	Storage temperature:	-5°C to 45°C -20°C to 50°C				
Physical Properties	Weight in air	5.9 kg including electronics, transducer, float, and batteries				
,	Dimensions Electronics housing: 16 x 21 x 11 cm					
	Transducer: 3.5 cm diam. x 15 cm length; Float: 42 x 70 x 10 cm					
		(line drawings available upon request)				

1 Assume one good cell (minimum cell size) with high precision profiling mode, range measured from the transducer surface. 2 Assume fresh water, actual range depends on temperature and suspended solids concentration.



### www.teledynemarine.com

14020 Stowe Drive, Poway, CA 92064 USA Tel. +1-858-842-2600 • Email: rdisales@teledyne.com Les Nertieres 5 Avenue Hector Pintus 06610 La Gaude France Tel. +33-49-211-0930 • Email: rdie@teledyne.com

<sup>3 2</sup> m/s for standard float; 3.5 m/s for optional high-speed float.

<sup>4</sup> Assume uniform water temperature and salinity profile.

<sup>5</sup> Nominal range; actual may vary with environmental conditions.