


RiverRay ADCP


Acoustic Doppler Current Profiler

Go straight to work collecting highly accurate stream and river discharge data with the new RiverRay Acoustic Doppler Current Profiler (ADCP).







Automatic adaptive sampling



Superior surface measurements



No cables required



DGPS compatible

This economical, turn-key system comes complete with: the ADCP, boat, software, and wireless communications- everything you need to collect superior, real-time data.

From a shallow stream to a raging river, the revolutionary RiverRay delivers the simplicity and reliability your operations require, at a price that won't break your budget.

Technical specifications

Water velocity profiling

Operation mode	broadband or pulse-coherent, automatic
Velocity range	± 5 m/s default, ± 20 m/s max.
Profiling range	0.4 m to 40 m
Accuracy	± 0.3 % of water velocity relative to ADCP, ± 2 mm/s
Resolution	1 mm/s
Number of cells	automatic, 25 typical, 200 max.
Cell size	10 cm min. (automatic selection)
Surface cell range	25 cm
Data output rate	1 - 2 Hz (typical)

Bottom tracking

Operation mode	broadband
Velocity range	± 9.5 m/s
Maximum depth	70 m (@15°C, fresh water)
Accuracy	± 0.3 % of water velocity relative to ADCP, ± 2 mm/s
Resolution	1 mm/s

Depth measurement

Range	0.3 m to 70 m (@15 °C, fresh water)
Accuracy	± 1 % (with uniform water temperature and salinity profile)
Resolution	1 mm

Standard sensors

Sensor	Temperature	Tilt (solid state)	Compass (heading)
Range	- 5 °C to 45 °C	±90°	0 – 359.99°
Accuracy	± 0.4 °C	±0.3°	±2°

Power

Input voltage	10.5 to 18 V DC
Power consumption	1.5 W typical
Battery (inside float)	12 V, 7 A - hr lead acid gel cell (rechargeable)
Battery capacity	> 40 hrs continuous operation

Float (included)

Configuration	three hulls (trimaran)
Material	polyethylene
Dimensions	1200 x 800 x 180 mm
Weight	10 kg bare, 17 kg with instrument and battery

GPS integration (optional)

Integration with GPS (customer supplied) through RS-232 to RR data stream

Environmental

Operating temperature	-5 °C to 45 °C
Storage temperature	20 °C to 50 °C

Transducer and hardware

Storage temperature	-20 °C to 50 °C
System frequency	600 kHz
Configuration	phased array (flat surface), janus four beams at 30° beam angle
Internal memory	16 mb internal recorder

Communications

Standard	RS-232, 1200 to 115,200 baud; Bluetooth, 115,200 baud, 200 m range
Optional	radio modem, range > 30 km (line of sight)

Software (included)

WinRiver II, Windows XP / Vista compatible



ISO Quality Certified Company

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