

RS3600D

RIVER STAR DUAL-FREQUENCY ACOUSTIC DOPPLER
CURRENT PROFILER



► Highlights

The RiverStar RS3600D ADCP provides high-accuracy flow measurement in both shallow and deep-water environments. The 3600 kHz ultra-high frequency channel delivers precise results in shallow water, resolving velocities as low as 1 cm/s and reducing the near-surface blind zone to only 5 cm. For greater depths, the 1200 kHz band ensures stable and consistent performance. Through intelligent coordination of both frequencies, combined with a dedicated 600 kHz vertical beam, the RS3600D achieves comprehensive and reliable hydrological data collection with a single deployment.



► Your Solution for Advanced Hydrometry



4 beams @1200 kHz,
4 beams @3600 kHz,
and 1 vertical beam
@600 kHz



Blind Zone:
5cm



High Resolution:
1 mm/s.

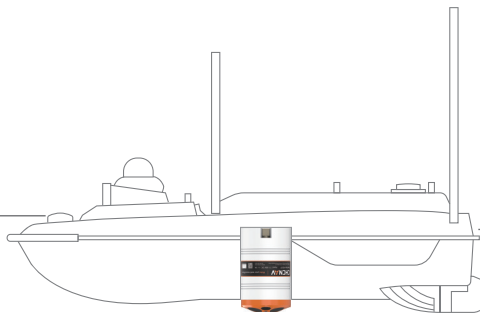


Android
software

► High-Precision Measurement

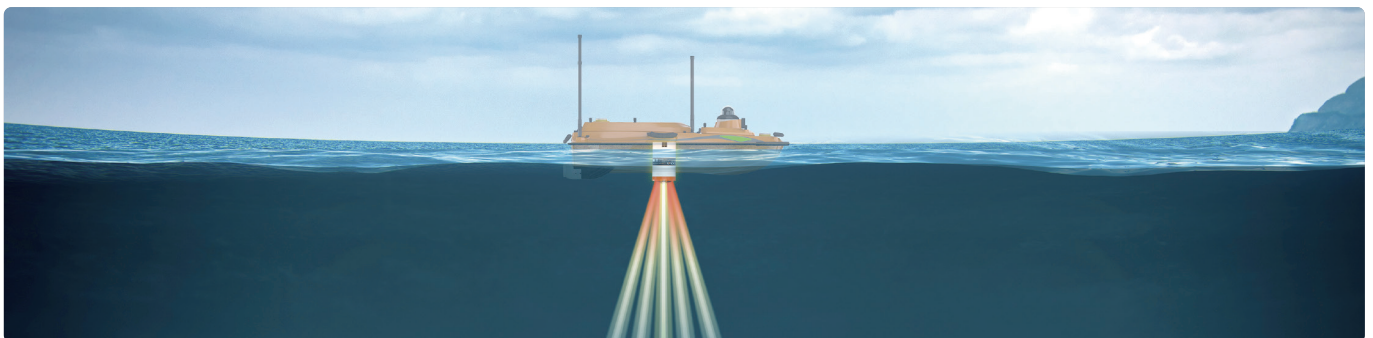
Ultra-high carrier
frequencies up to **3600kHz**

Minimum layer size of **2cm**



Minimum measurable
flow velocity **1cm/s**

Top blind zone of only **5cm**



Conventional ADCPs often struggle to provide accurate data in near-still water where flow velocities fall below 5 mm/s due to signal noise limitations. The RS3600D offers a minimum velocity measurement resolution of 1 mm/s, enabling precise data acquisition in low-velocity environments and supporting reliable hydrological surveys.

► Reliable Quality and Worry-Free Service



Built on years of engineering and real-world validation, the RS3600D guarantees dependable performance.

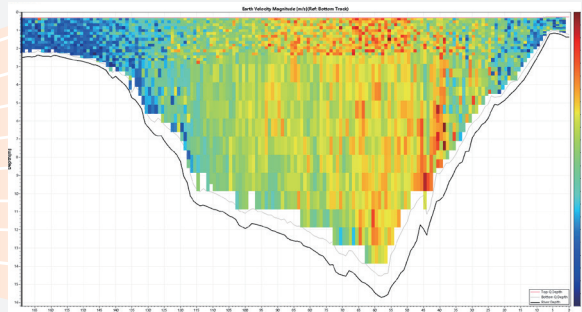


Global service network ensures responsive and worry-free support.

► User-Friendly Software



EasySail for CHCNAV APACHE 4 USV supports one-click file transfer and code sharing to a computer.



HydroProfiler for PC provides efficient and flexible data management for comprehensive hydrological analysis.

► Wide Adaptability



- The RS3600D ADCP measures only 12 cm in diameter and weighs 2 kg. Compatible with the CHCNAV APACHE 4 series USV, it can also be mounted on trimarans, cableway towing systems, motorized survey vessels, and channel buoys.
- Its versatility supports effective deployment across a wide range of hydrological survey applications.

► Use Cases



Hydrological Measurement



Ecological Flow



Channel Monitoring

SPECIFICATIONS

► RS3600D

Frequency (Flow)	1200 kHz & 3600 kHz
Frequency (Depth)	600 kHz
Transducer	9 beams:4 beams @1200 kHz, 4 beams @3600 kHz, and 1 vertical beam @600 kHz

► Water velocity profiling

Water velocity profiling	± 20 m/s maximum; ± 5 m/s default
Resolution standard	1 mm/s
Number of cells	260
Cell size	0.02~4 m
Profiling range	0.05~40 m
Accuracy	± 0.25% ± 2 mm/s

► Bottom tracking

Depth range	0.10~45 m
Accuracy	± 0.25% ± 2 mm/s
Velocity range	± 20 m/s maximum; ± 5m/s default

► Vertical beam (Depth measurement)

Frequency	600 kHz
Range	0.2~100 m
Resolution	1 mm
Accuracy	± 0.01 m + 0.1% × D (D = water depth)

► Standard sensors

Compass: Range/Accuracy/Resolution	0~360°/± 0.1°/0.01°
Tilt (pitch and roll): Range/Accuracy/Resolution	± 90°/± 0.15°/0.01°
Temperature: Range/Accuracy/Resolution	-10°C~85°C/± 0.1°C/0.01°C
Press (optional): Range/Accuracy/Resolution	0~200 m/0.5% FS/0.01 m

► General features

Operating mode	Broadband / pulse-coherent; automatic / manual
Data output rate	1-20 Hz
Voltage range	11 ~ 36 V DC, 12 V typical
Size (Height × Diameter)	191 mm×126 mm
Weight	2 kg
Depth rating	200 m
Communication interface	RS232, RS422 (optional)
Baud rate	4800 ~ 115200 (115200 default)
Internal storage	32 G (extensible)
Storage temperature	-30°C ~ 70°C
Operating temperature	-5°C ~ 45°C
Software	HydroProfiler, EasySail (Android)

*Specifications are subject to change without notice.

CHC Navigation Headquarter

577 Songying Road, Qingpu, 201703, Shanghai, China
MARKETING@CHCNAV.COM
+86 21 54260273

CHC Navigation Europe

Office Campus, Building A, Gubacsi út 6, 1097 Budapest, HUNGARY
+36 20 421 6430
Europe_office@chcnav.com

©2025 Shanghai Huace Navigation Technology Ltd. All rights reserved. The CHCNAV and CHCNAV logo are trademarks of Shanghai Huace Navigation Technology Limited. All other trademarks are the property of their respective owners. Revision December 2025.