

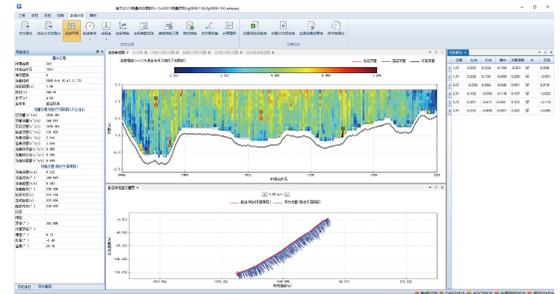
# SOUTH S5 Acoustic Doppler Current Profiler

## Product Overview

The SOUTH S5 is a high-performance 5-beam ADCP engineered for inland, offshore and complex water environments. Leveraging advanced acoustic Doppler technology, it delivers precision velocity and discharge measurements even in high-velocity and high-sediment conditions—the ultimate tool for smart hydrology and environmental monitoring.

## Key Features

- **5-Beam Configuration:** Four slanted beams for current profiling and one dedicated vertical beam for precision depth sounding up to 200m.
- **High-Sediment Capability:** Enhanced bottom-tracking algorithms specifically optimized for turbid and high-sediment waters.
- **USV Integration:** Seamless integration with the M20/M20 pro Unmanned Surface Vehicle (USV) for autonomous surveying and long-range wireless data transmission.
- **Rugged Design:** Internal frame architecture for superior shock resistance and easy maintenance in harsh field conditions.



CurrentPro Software



M20 pro USV Options

## Applications

- Flood Forecasting & Warning
- Water Diversion & Resource Management
- Environmental Water Monitoring
- Smart Agriculture & Utilities

## Specifications

Model	S5-1200	S5-600	S5-300
<b>Velocity Measurement</b>			
Accuracy	±0.25%±2mm/s	±0.25%±2mm/s	±0.3%±3mm/s
Frequency	1200kHz	600kHz	300kHz
Cell Size	0.05~2m	0.2~4m	1~8m
Number Of Cells	260		
Ping Rate	Max 20Hz		
Resolution	1mm/s		
Velocity Profiling Range	±20m/s		
Distance Profiling Range	0.1~40m	0.4~90m	1~150m
<b>Sensor</b>			
Transducer	5-Beam		
Compass	Range: 0~360°; Accuracy: ±0.5° (Calibrated); Resolution: 0.01°		
Temperature	Range: -15°To 85°C; Accuracy: ±0.5°C; Resolution: 0.01°Cv		
Tilt (Pitch and Roll)	Range: ±90°;Accuracy: ±0.2°; Resolution: 0.01°		
<b>Bottom Tracking</b>			
Velocity Profiling Range	±20m/s		
Bottom Tracking Range	0.15~55m	0.8~120m	2~200m
Bottom Tracking Accuracy	± 0.25% ± 2mm/s	± 0.25% ± 2mm/s	±0.25%±2mm/s
Depth Range	0.2~200m		
Central Beam Frequency	300kHz~400kHz		
<b>Physical Properties</b>			
Weight	7.8kg In Air, 5kg In Water (Standard Configuration)		
Size	Height:275mm , Diameter:216mm		
Storage Temperature	-25 to 65°C		
Operating Temperature	-5 to 45°C		
Depth rating	300m (Customizable)		
<b>Power Supply/Communication</b>			
Baud Rate	2400 ~115200		
Power Consumption	Avg: 3W		
Internal Recorder Size	Up To 32GB		
Protocol	RS422, RS232, Or Ethernet		
Input Voltage	9-36VDC		
<b>Transducer/Hardware</b>			
Work Pattern	Broadband And Other Working Modes		
Shell Material	Polyoxymethylene (Standard), Titanium Alloy, Or Aluminum Alloy Available		
Structure Type	Piston JANUS Structure		
<b>Software</b>			
SOUTH CurrentPro – Integrated Field Data Acquisition & Navigation			