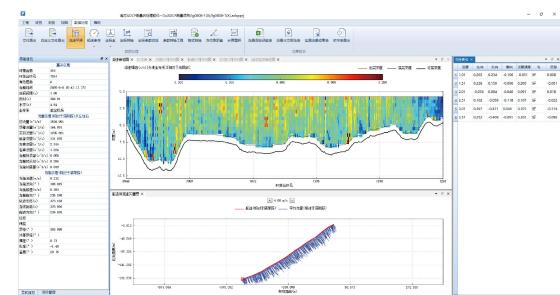


SOUTH S5 Acoustic Doppler Current Profiler

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.



CurrentPro Software

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.



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			
Velocity Measurement						
Accuracy	$\pm 0.25\% \pm 2\text{mm/s}$	$\pm 0.25\% \pm 2\text{mm/s}$	$\pm 0.3\% \pm 3\text{mm/s}$			
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	$\pm 20\text{m/s}$					
Distance Profiling Range	0.1~40m	0.4~90m	1~150m			
Sensor						
Transducer	5-Beam					
Compass	Range: 0~360°; Accuracy: $\pm 0.5^\circ$ (Calibrated); Resolution: 0.01°					
Temperature	Range: -15°To 85°C; Accuracy: $\pm 0.5^\circ\text{C}$; Resolution: 0.01°C					
Tilt (Pitch and Roll)	Range: $\pm 90^\circ$; Accuracy: $\pm 0.2^\circ$; Resolution: 0.01°					
Bottom Tracking						
Velocity Profiling Range	$\pm 20\text{m/s}$					
Bottom Tracing Range	0.15~55m	0.8~120m	2~200m			
Bottom Tracking Accuracy	$\pm 0.25\% \pm 2\text{mm/s}$	$\pm 0.25\% \pm 2\text{mm/s}$	$\pm 0.25\% \pm 2\text{mm/s}$			
Depth Range	0.2~200m					
Central Beam Frequency	300kHz~400kHz					
Physical Properties						
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)					
Power Supply/Communication						
Baud Rate	2400 ~115200					
Power Consumption	Avg: 3W					
Internal Recorder Size	Up To 32GB					
Protocol	RS422, RS232, Or Ethernet					
Input Voltage	9-36VDC					
Transducer/Hardware						
Work Pattern	Broadband And Other Working Modes					
Shell Material	Polyoxymethylene (Standard), Titanium Alloy, Or Aluminum Alloy Available					
Structure Type	Piston JANUS Structure					
Software						
SOUTH CurrentPro – Integrated Field Data Acquisition & Navigation						