ADCP-300K

Acoustic Doppler Current Profiler 300kHz



Overview

The ADCP-300 Acoustic Doppler Current Profiler (ADCP) adopts piston array technology. It can measure current velocity profiles, water depth and cross-section discharge within a maximum depth of 150 meters. The unit can be quickly installed on survey vessels and trimarans for underway observation.

It supports connection to various auxiliary devices such as compasses, GNSS receivers and radio stations to realize remote telemetry and data transmission.

Based on the acoustic Doppler principle, the instrument outputs real-time and accurate data including current velocity, discharge, water level and water temperature. It provides reliable data support for hydrological surveys, flood early warning systems, water diversion projects, water environment monitoring, smart agriculture, smart water services and other fields.

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TECHNICAL SPECIFICATIONS

Model	ADCP-300K
Operating Frequence	300kHz
Beam Configuration	4 Beams / 5 Beams
Center Beam Frequency	phased 400kHz
Current Velocity Range	±10m/s (Default); ±20m/s (Max.)
Current Velocity Accuracy	±0.25%V ±0.2cm/s
Current Velocity Resolution	1mm/s
Depth Cell Range	1~8m
Number of Depth Cells	1~255
Pulse Frequency	1Hz
High-Precision Mode Range	120m
Max. Range	150m
other configurable function	Bottom tracking
Bottom Tracking Depth Range	2~300m
Bottom Velocity Accuracy	±0.25%V ±0.2cm/s
Sensor（Temperature/pressure)	Range: -5℃~+45℃; Precision: ±0.5℃; Resolution: 0.01℃
3D High-Precision Electronic Compass	Optional
Bearing	Range: 0˚~360˚; Precision: Calibration≤0.3° (RMS) (pitch Range -20°~20°); Resolution: 0.01˚; Repetitiveness: 0.05° (RMS)
pitch angle	Range:-90˚~90˚; Precision:≤0.2˚(RMS); Resolution: 0.01˚; Repetitiveness: 0.05° (RMS)
Roll angle	Range:-90˚~90˚; Precision:≤0.2˚(RMS); Resolution: 0.01˚; Repetitiveness: 0.05° (RMS)
Input Voltage	18~36V
Average Power Consumption	7W
Communication Protocol (selectable)	Ethernet, RS422, RS232
Internal Storage Capacity	Standard 16GB
Dimensions	Φ250mm × 170mm
Weight	15kg

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