

Doppler Current Sensor Blue 5430



DCS Blue 5430 is a rugged self-recording current meter with Bluetooth for communications and data retrieval. The instrument uses a true vector-averaging sensor for measuring current speed and direction in salt or fresh water.

Advantages:

- Internal data storage
- Configuration and data retrieval by use of Bluetooth or RS-232 cable
- External LED with color code reports status
- Software for configuration and retrieval of data and USB to Bluetooth adapter included
- Temperature measurement
- Direct readout of engineering data
- Fast sampling rate
- Low power consumption
- Insensitive to fouling
- Low maintenance needs

The DCS Blue is a stand alone current sensor which also measures water temperature as standard. The sensor is powered trough cable from shore or via battery connected to the sensor (not included).



Configuration and data retrieval

The instrument configuration and data retrieval procedures are accomplished by means of Aanderaa's **Real Time**

Collector software. This package allows the user to establish a secure connection with the DCS Blue over the Bluetooth channel or via RS-232 cable with the purpose of configuration and retrieval of the data stored in the instrument.

Postprocessing software

A basic version of Data Studio software is provided with the instrument and allows basic data quality control and plotting procedures as well as reviewing the configuration of the instrument during the measurement session, and exporting the collected data to various formats like Excel, Matlab etc.



The solid state sensor is well suited for monitoring low current speeds due to no moving parts. Because the sensor starts measuring in an area 0.4 to 1.0 meter from the instrument, the effect of marine fouling and local turbulence is minimized.

PIN CONFIGURATION SUBCONN MCBH8



Technical Details	
Recording System: Storage Capacity: Recording Interval: Depth Capacity : Material and Finish: Platform Dimensions: Weight: Supply Voltage: Operating Temperature:	Internal data storage Standard 1GB 2s - 2h 300m PUR, POM H: 192mm OD: 120mm In air: 1.5kg In Water: 0.3kg 6 - 30Volts -5 to +50°C
Current Speed: Range: Resolution: Mean Accuracy: Relative: Statistic precision (std):	(Vector averaged) 0 - 300cm/s 0.1mm/s ±0.15cm/s ± 1% of reading 0.3cm/s (ZPulse mode), 0.45cm/s ¹⁾
Current Direction: Range: Resolution: Accuracy:	0 – 360° magnetic 0.01° ±3° for 0-15° tilt and ±5° for 15-35° tilt
Temperature: Range: Resolution: Accuracy:	-5°C to +40°C 0.01°C 0.05°C
Settling Time (63%):	<3s
Tilt: Range: Resolution: Accuracy:	0-50° 0.01° ±1.5°
Compass: Resolution: Accuracy:	0.01° ±3°
Acoustics: Frequency: Power: Beam angle (main lobe):	1.9 to 2.0 MHz 25 Watts in 1ms pulses 2°
Electrical connection:	8-pin Subconn MCBH8M
Installation Distance: From Surface: From Bottom:	0.75m 0.5m
Accessories, included:	Data Studio, Magnetic tip stylus + spare, Documentation on Memory Stick
Accessories, optional:	Aadi Real Time Collector, USB to Bluetooth adapter

¹⁾Standard deviation based on 300 pings

The above specifications are for the stand-alone sensor only, not the installation it is utilized with.

Specifications subject to change without prior notice.

Aanderaa Data Instruments AS Sanddalsringen 5b P.O. Box 103 Midtun 5843 Bergen, Norway



+47 55 60 48 00 aanderaa.info@xylem.com



DCS Blue 5430 is a trademark of Xylem or one of its subsidiaries. © 2022 Xylem, Inc. XAD430 0623

