

# 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 through cable from shore or via battery connected to the sensor (not included).

# Specifications DOPPLER CURRENT SENSOR BLUE

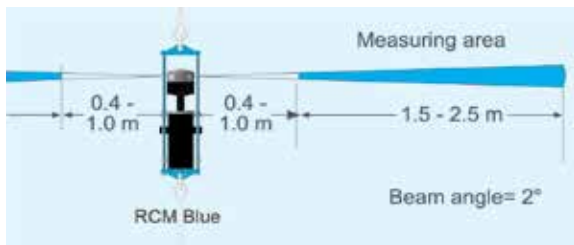
## Configuration and data retrieval

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.

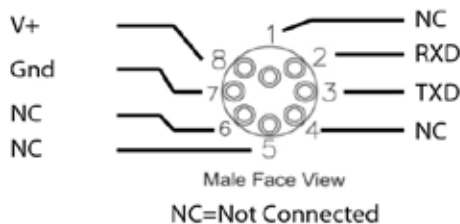
## Postprocessing software

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

<b>Recording System:</b>	Internal data storage
<b>Storage Capacity:</b>	Standard 1GB
<b>Recording Interval:</b>	2s - 2h
<b>Depth Capacity:</b>	300m
<b>Material and Finish:</b>	PUR, POM
<b>Platform Dimensions:</b>	H: 192mm OD: 120mm±0.005 S/m ( ±0.05 mS/cm)
<b>Weight:</b>	In air: 1.5kg In Water: 0.3kg
<b>Supply Voltage:</b>	6 – 30Volts
<b>Operating Temperature:</b>	-5 to +50°C
<b>Current Speed:</b>	(Vector averaged)
Range:	0 – 300cm/s
Resolution:	0.1mm/s
Mean Accuracy:	±0.15cm/s
Relative:	± 1% of reading
Statistic precision (std):	0.3cm/s (ZPulse mode), 0.45cm/s <sup>1)</sup>
<b>Current Direction:</b>	
Range:	0 – 360° magnetic
Resolution:	0.01°
Accuracy:	±3° for 0-15° tilt and ±5° for 15-35° tilt
<b>Temperature:</b>	
Range:	-5°C to +40°C
Resolution:	0.01°C
Accuracy:	0.05°C
<b>Settling Time (63%):</b>	<3s
<b>Tilt:</b>	
Range:	0-50°
Resolution:	0.01°
Accuracy:	±1.5°
<b>Compass:</b>	
Resolution:	0.01°
Accuracy:	±3°
<b>Acoustics:</b>	
Frequency:	1.9 to 2.0 MHz
Power:	25 Watts in 1ms pulses
Beam angle (main lobe):	2°
<b>Electrical connection:</b>	8-pin Subconn MCBH8M
<b>Installation Distance:</b>	
From Surface:	0.75m
From Bottom:	0.5m
<b>Accessories, included:</b>	Data Studio, Magnetic tip stylus + spare, Documentation on Memory Stick
<b>Accessories, optional:</b>	Aadi Real Time Collector, USB to Bluetooth adapter

<sup>1)</sup>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.**

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