



DATALOGGER 3860/3860A

A rugged electronic device for logging up to 30 Aanderaa sensors. This unit is the heart of Aanderaa's new Data Buoy 4700.

Features:

- 30 Sensor inputs
- 2-way communication port for connection to modem, enabling remote data downloading and programming.
- 1-way communication port for connection to Radio communication, enabling long distance real-time data.
- In case of communication failure, recorded data is stored internally.

The SeaGuard CTD is a primary tool for determining essential physical properties of sea and fresh water. Standard parameters are Conductivity, Pressure/ Instrument depth and Temperature. From these parameters the salinity of the water as well as the density are calculated.

The SeaGuard CTD is designed for continuous recordings of salinity (via conductivity measurements), temperature and depth (via pressure measurements) used in long term deployments. Typical application areas are related to e.g. coastal circulation, climatic studies and aquaculture. The SeaGuard CTD can also be used as a multi-parameter platform for additional measurements.

The included Conductivity Sensor (4319B) is an intelligent sensor based on an inductive principle. This provides for stable measurement without electrodes that are easily fouled and may wear out in the field.

The included Temperature Sensor (4880/4060) is an intelligent sensor based on a thermistor-bridge.

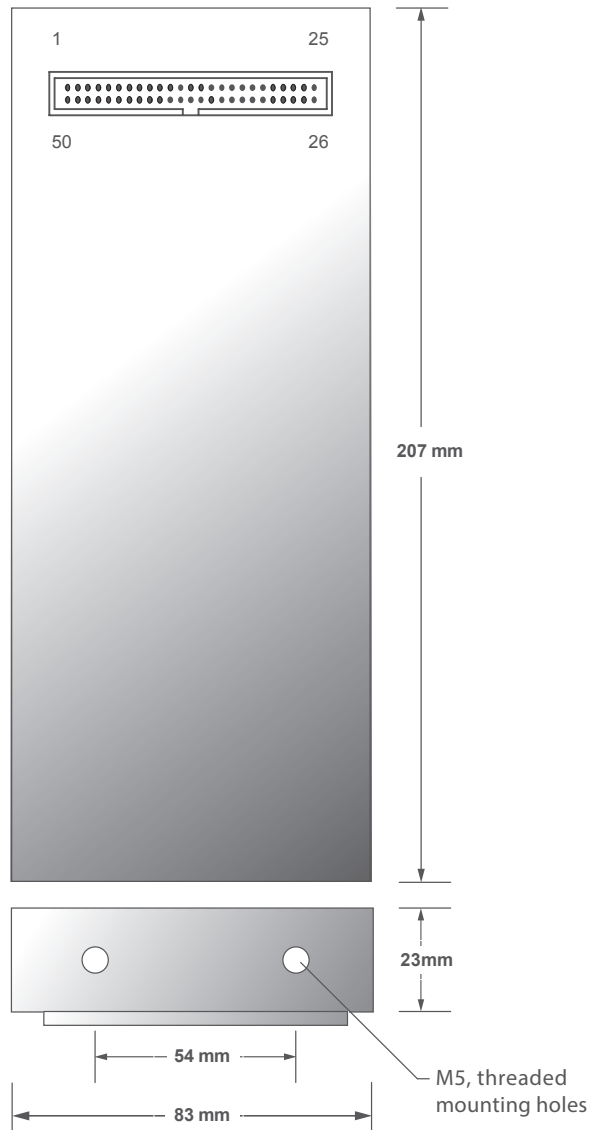
The included Pressure Sensor (4646/4117) is a compact yet intelligent sensor based on a silicon piezoresistive bridge sampled and temperature compensated by an advanced Digital Signal Processor.

The output parameters from the SeaGuard CTD are easily presented in SeaGuard Studio. Salinity, Density, Depth and Sound of speed is post- calculated in SeaGuard Studio.

The SeaGuard CTD and the Aanderaa smart sensors are interfaced by means of a reliable CANbus protocol (AiCaP) using XML for plug and play capabilities. The smart sensors can be mounted directly on the top end plate of an Aanderaa SeaGuard and are automatically detected and recognized.

The SeaGuard CTD can be used with Aanderaa Real-Time Collector for real-time data.

The SeaGuard CTD has 2 battery compartments for long deployment time.



Input signal: Up to 30 VR22 or SR10 sensors

Recording intervals: 0.5, 1, 2, 5, 10, 20, 30, 60, 120, and 180 minutes. In addition: non-stop and remote start. 4 seconds each channel

Remote Start: 5V positive pulse to pin 24 of the PDC-4 output

Resolution: 10-bit binary

Accuracy: ±1bit binary

Battery Indication: Range: 6-15 V

Output signals: Aanderaa 10-bit PDC-4 code

Last reading & Com port: ASCII coded selectable from 1200 to 9600 baud, 8 data bit, 1 stop bit, no parity, no handshake. RS-232C string format, See Technical Description TD 216, Operating Manual Data-logger 3860

Internal storage: RAM (see table in Manual)

Current Consumption: Quiescent: 40µA, 10mA average when operating

Power Supply: 7 to 14V DC

Operating Temperature: -40 to +60°C

Material and Finish: Scotchcast molding with hard anodized aluminum case, 10-15µ

Weight: 500 grams

Warranty: Two years against faulty materials and workmanship

Accessories optional: AC/DC Adapter 3373

PIN CONFIGURATION

01. Channel 18	26. Channel 15
02. Channel 20	27. Channel 6
03. Channel 22	28. Channel 7
04. Channel 24	29. Control Voltage
05. Channel 26	30. Bridge Voltage
06. Channel 28	31. Channel 4
07. Channel 30	32. Channel 9
08. Txd, Last Reading	33. System Ground
09. Voice Control	34. Channel 11
10. Txd, Com. Port	35. Channel 2
11. DCD	36. Channel 13
12. NC	37. NC
13. NC	38. NC
14. -9V	39. Transceiver
Control	
15. Channel 14	40. Rxd, Com. Port
16. Channel 10	41. Ring
17. -9V	42. Rxd, Last
Reading	
18. Battery	43. Channel 31
19. Channel 3	44. Channel 29
20. Channel 8	45. Channel 27
21. Channel 12	46. Channel 25
22. Bridge Ground	47. Channel 23
23. Channel 5	48. Channel 21
24. PDC-4 Output	49. Channel 19
25. Channel 16	50. Channel 17

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