





fastCTD Profiler

Fast response CTD profiler

An evolution of the miniCTD, the fastCTD Profiler is designed to deliver the highest quality CTD casts at fast drop rates. A conductivity cell designed for optimum flow-through, a fast-response thermistor temperature sensor and a 0.01% pressure sensor synchronously sampling at up to 32Hz deliver the highest quality profiles in a lightweight and robust package.

Add in an integral Turbidity or Fluorometer based on Valeport's new Hyperion range, an optional Bluetooth communications module and the fastCTD Profiler offers a unique and versatile solution.

DATA SHEET

Product Details





SOUND SPEED









Sensors Conductivity 0-80 mS/cm Range Resolution 0.001 mS/cm Accuracy ±0.01 mS/cm Response 30 milliseconds **Temperature** Range -5 °C - +35 °C 0.001 °C Resolution Accuracy ±0.01 °C Response 50 milliseconds Pressure Range 10, 20, 30, 50, 100, 200, 300, 400 & 600 bar Resolution 0.001% full scale Accuracy ±0.01% full scale Response 1 millisecond **Electrical** Internal 1 x D Cell 1.5V Alkaline or 3.6V Lithium External if fitted with a connector 9-28V DC isolated Power <250mW SubConn MCBH10F (if fitted) Connector

Sampling Modes		
Continuous	Regular and synchronous data collection from all sensors up to 32Hz	
Profile	Data is logged as the instrument descends (or rises), by a user defined pressure difference, through the water column	
Rapid	Once the instrument is set to run mode no data is logged until a programmed trigger depth is reached (e.g. 2 meters below the surface).	

Completely programmable, the device can be set to record down casts data only, for example, when the probe stops descending and rises by a defined amount logging is stopped.

Communications

The instrument is designed to operate autonomously. Setup and data extraction can be performed using a SubConn connector or via an optional Bluetooth connection with a PC. Multiple profiles can be recorded in the instrument by switching it on then off using the connector switch plug or magnetic switch key for Bluetooth operation.

Bluetooth auto-pairing and discovery make connecting to the instrument simple and robust. $\label{eq:connecting}$

The instrument can also operate in real time or cabled comms. Supplied with a traditional SubConn connector with a choice of communication protocols fitted as standard and selected by pin choice on the output connector.

Direct Reading		
RS232	Up to 200m of cable	
Baud Rate	38400 to 460800	
Bluetooth	8 data bits, 1 stop bit, no parity, no flow control	

Solid state non-volatile Flash memory

Memory

Capacity	>10 million lines of data
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(equivalent to 5,000 profiles to 1,000m with a 1m profile resolution)

Physical	
Materials	Titanium housing
Depth Rating	6000m
Instrument Size	ø54mm x 510mm
Weight in air	2.6kg / 4.9kg including frame
Weight in water	1.5kg

Software

Supplied with DataLog X2 Windows based software, for instrument setup, control, data extraction and display.

Titanium Housing

0660036T1-XX	fastCTD Profiler
	6000m with connector

0660036TT-BT-XX	fastCTD Profiler
	2000m with Bluetooth

Where

XX Pressure sensor options 10, 20, 30, 50, 100, 200, 300, 400 & 600 Bar.







