



rapidPro CTD and rapidPro CTDplus



The rapidPro CTD has been developed for the rapid collection of conductivity, temperature (Thermistor) and depth without compromising the quality of the data. Now further developed with an new optimised shape and removable ProLogger module that combines a rechargeable lithium ion battery, data logger, GPS receiver and Bluetooth comms.

The rapidPro CTDplus gives access to a number of optical sensor in addition to CTD.

Optionally, the rapidPro CTD is designed to operate with the Teledyne OceanScience rapidCAST underway profiling winch to deliver the highest quality CTD and optional optical parameter casts on the move. While the vessel is underway profiles of up to 450m at 6 knots are expected.

Sensor Specifications

Conductivity

Range:	0 - 80 mS/cm
Resolution:	0.001 mS/cm
Accuracy:	±0.01 mS/cm
Response:	31.25 milliseconds

Pressure

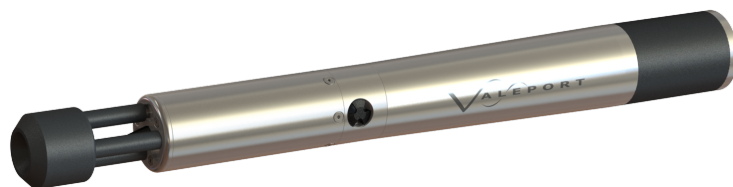
Range:	100 or 200 Bar
Resolution:	0.001% range
Accuracy:	±0.01% range
Response:	31.25 millisecond

Temperature - Thermistor

Range:	-5°C to +35°C
Resolution:	0.001°C
Accuracy:	±0.01°C
Response:	50 milliseconds

Optical Sensor Options - rapidPro CTDplus

Chlorophyll a	0-800 µg/l 2 gain settings: 0-40, 0-800
Fluorescein	0-500 ppb 2 gain settings: 0-25, 0-500
Rhodamine	0-1000 ppb 2 gain settings, 0-50, 0-1000
Turbidity	0 to > 6,000 NTU linear response Using nephelometric and OBS techniques



rapidPro CTD with integral ProLogger module



ProLogger Module

Communications

Through the ProLogger an integral Bluetooth module for configuration & data recovery also, when removed from the rapidPro housing USB comms directly to PC.

Memory

The rapidPro CTD is fitted with an SD memory card with more than sufficient capacity.

Electrical

Battery:	Rechargeable Lithium Ion battery module
Battery Life:	in excess of 12 hours continuous operation from a fully charged pack*

*battery consumption estimates are based on recording down casts only at 8Hz observation period and no optical sensor.

Physical

Materials:	Titanium/PEEK housing Polyurethane and Ceramic sensor components Titanium & composite sensor components
Depth Rating:	2000m
Instrument Size:	Ø62mm x Length 605mm
Weight:	4.5kg (in air)

Software

The system is supplied with Valeport Connect PC software, for instrument setup, data extraction and display.

Valeport Connect PC software is license free.

Ordering

0660045-XX	rapidPro CTD
	rapidPro CTDplus:
0660045FC-XX	Chlorophyll a Fluorometer
0660045FF-XX	Fluorescein (Uranine) Fluorometer
0660045FR-XX	Rhodamine Fluorometer
0660045FT-XX	Turbidity Sensor

where: XX pressure transducer range
select from 100 or 200 Bar

Supplied with:	<ul style="list-style-type: none"> • 1x ProLogger module • 2x switch keys • Bluetooth module with external antenna and cable • Tool kit • Valeport Connect PC software • Operating manual and system transit case
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rapid Profiler with Teledyne rapidCAST Underway Profiling Winch