

SWiFT Deep CTD

CTD Profiler

Designed from the outset with the intention of a seamless workflow, the SWiFT Deep CTD profiler provides survey-grade sensor technology coupled with the convenience of **Bluetooth®** wireless technology and rechargeable batteries. An integral GNSS module, to geo-locate each profile, completes the package. Data can be easily and quickly downloaded and reviewed wirelessly via Bluetooth connectivity using Valeport's Ocean software for Windows, iOS or Android. Data can be instantly shared, in industry standard data formats through email and cloud services. A USB Cable and Bluetooth adapter are provided.

In addition to the directly measured conductivity, temperature and depth measurements, salinity, density and sound velocity are calculated using the UNESCO international standard algorithm and Chen and Millero equation.

With a deployment cage, large internal Lithium-ion rechargeable battery and the convenience of charging via USB, SWiFT Deep CTD is intended for hydrographic and offshore use to 6,000 m and offers the highest quality CTD profiles in a compact, robust and portable package.

DATA SHEET

Product Details



MULTI-PARAMETER
CTD



SOUND
SPEED



OCEAN SOFTWARE



USB



Rechargeable
Battery



GNSS

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Sensor Specifications

The SWiFT Deep CTD is fitted with Valeport's conductivity sensor, temperature compensated piezo-resistive pressure transducer and a new fast response thermistor temperature sensor.

Conductivity

Range	0-80 mS/cm
Resolution	0.001 m/s
Accuracy	±0.01 m/s

Temperature

Range	-5 °C – +35 °C
Resolution	0.001 °C
Accuracy	±0.01 °C

Pressure

Range	100, 200, 300 or 600 Bar
Resolution	0.001% FS
Accuracy	±0.01% FS

Calculated Parameters and Accuracy

Calculations based on the UNESCO international standard algorithm (Chen and Millero equation)

Sound Velocity	~0.25 m/s
Salinity	±0.01 PSU
Density	±0.01 kg/m ³

Physical

Materials	Housing - titanium Sensor Guard - acetal Temperature Sensor - titanium Pressure Sensor - titanium Conductivity Sensor - polyurethane coated titanium with ceramic core Deployment frame - 316L stainless steel and polyurethane
Depth Rating	6,000 m
Dimensions	ø80 mm x Length 330 mm
Weight	2.9 kg (in air) 1.7 kg (in water)

Communications (set up and data offload)

USB Serial

Bluetooth v4 Low energy

Electrical

Battery Internal rechargeable Li-ion battery pack

Battery life 5 days continuous operation
Up to 30 days sample scenario dependant

Charging USB
Typically, 1 hour fast charge will give 12 hours operation

Software

iOS and Android Valeport Ocean App for Bluetooth compatible mobile devices – instrument set up, data offload, display and translation to common data formats. Valeport's Ocean PC software, with both USB cable and Bluetooth connectivity, for instrument setup, data extraction, display and translation to common data formats.

Instrument and data time is synchronised to GNSS, UTC.

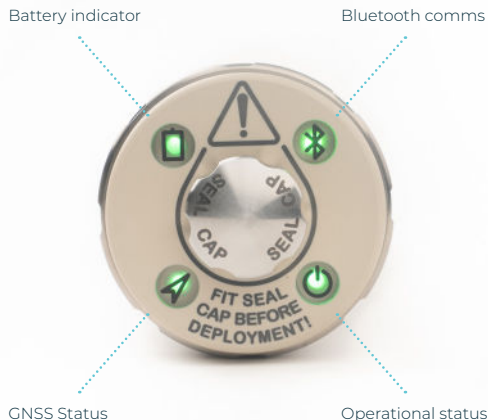
Ordering

0660050-XX SWiFT Deep CTD Profiler
Titanium housing rated to 6,000 m

Supplied with PC Bluetooth adapter
USB interface and charging cable 1.5 A charger
Valeport Ocean software
Operating manual
System transit case



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