



SWiFT CTD

CTD Profiler

Designed from the outset with the intention of a seamless workflow, the SWiFT CTD profiler provides survey-grade sensor technology coupled with the convenience of Bluetooth connectivity and rechargeable batteries. An integral GPS module, to geo-locate each profile, completes the package. Data can be easily and quickly downloaded and reviewed wirelessly, via Bluetooth, using the Ocean software available for iOS, Android and PC device and 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 is calculated using the UNESCO international standard algorithm and Chen and Millero equation.

With an operational battery life of up to 5 days and the convenience of charging via USB, SWiFT CTD is intended for offshore, coastal, harbour and inland environmental and hydrographic survey use to 500m and offers the highest quality CTD profiles in a compact, robust and portable package.

Optionally, there is a deployment cage available to bolt onto the instrument to help get the SWiFT CTD to depth in fast-flowing currents.

DATA SHEET

Product Details



MULTI-PARAMETER CTD



SOUND SPEED



OCEAN SOFTWARE



Bluetooth



USB



Rechargeable Battery



GPS

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Sensor Specifications

The SWIFT 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 mS/cm
Accuracy	±0.01 mS/cm

Temperature

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

Pressure

Range	50 Bar
Resolution	0.001% FS
Accuracy	±0.01% FS

Calculated Parameters and Accuracy

Calculations based on the UNESCO international standard algorithm and 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
Depth Rating	500m
Dimensions	ø78mm x Length 350mm
Weight	2.7kg (in air) / 1.65kg (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
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 GPS, UTC.

Ordering

0660049-50	SWIFT CTD Profiler Titanium housing rated to 500m
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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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