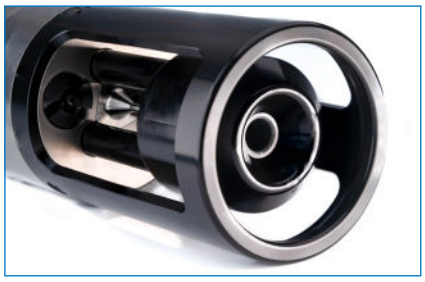

SWiFT Deep CTD

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 Teledyne 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

Bluetooth

USB

RECHARGEABLE BATTERY

GNSS

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St. Peters Quay, Totnes,
Devon TQ9 5EW United Kingdom

+44 1803 869292
Valeport-Sales@Teledyne.com
www.valeport.co.uk

TELEDYNE VALEPORT
Everywhereyoulook™

Sensor Specifications

The SWiFT Deep CTD is fitted with Teledyne 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	100, 200, 300 or 600 Bar
Resolution	0.001% FS
Accuracy	±0.01% FS

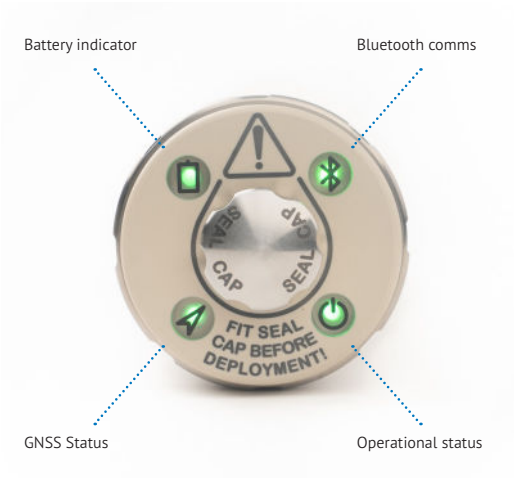
Calculated Parameters and Accuracy

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/m³

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 Teledyne Valeport Ocean App for Bluetooth compatible mobile devices – instrument set up, data offload, display and translation to common data formats. Teledyne 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 Teledyne Valeport Ocean software Operating manual System transit case

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