

## Single Fire Module

The time-tested Multi Water Sampler technology reduced to the max – releasing a single water sampler at a precise depth



### ABOUT

The Single Fire Module consists of a Plastic Water Sampler (also known as Niskin Bottle) of 1.7 litres capacity, mounted to a stainless steel rack which is equipped with a motor-driven release device. Power supply is made by internal rechargeable lithium-ion batteries, using the safest chemistry currently available.

### Digital standard model

The digital standard model, by design, is a stand-alone instrument. In online mode, operated in conjunction with standard electro-mechanical cables, the water sampler is actuated via push-button control by the battery powered Hand Unit. This also handles measuring data of the integrated high-precision pressure sensor.

In offline mode, operated in conjunction with steel or fiber ropes, the water sampler is automatically actuated according to a pre-programmed pressure (depth). Measuring data of the pressure sensor is recorded inside the internal data memory during the operation.

### Digital model for control by external CTD probes

This model has been designed to be controlled by external up-to-date CTD probes. It is equipped with a serial RS-232 port to receive action commands and provide a return signal to the CTD. This version is not equipped with a pressure sensor.

### Analogue model for control by external CTD probes

Even old-fashioned CTD probes are able to control the Single Fire Module. For this purpose a model with an analogue interface is available which is activated by a switched contact and delivers a return signal and battery voltage via two analogue channels. This version is not equipped with a pressure sensor.

## FEATURES

- ▶ Digital and analogue versions available for adaption to various applications
- ▶ Compact size and low weight
- ▶ Standard depth range 3000 m
- ▶ Low power consumption
- ▶ Battery operated Underwater Unit
- ▶ Electronics operate from -40°C up to +85°C
- ▶ EC-conformity (CE) EN 50081-1, EN 50082-1



## TECHNICAL DATA

<b>Dimensions</b>	1200 x 120 x 255 mm
<b>Empty weight</b>	8.5 kg
<b>Material</b>	Titanium, stainless steel, POM, PVC
<b>Operational depth</b>	max. 3000 m
<b>Hand Unit</b>	Plastic housing, splash-proof (IP 65), battery powered LC-display 4 x 20 characters, interface for PC (RS-232)
<b>Data memory</b>	4 MByte
<b>Data rate</b>	1 Hz (1 data set per sec.)
<b>Pressure sensor</b>	0.0 ... 3000.0 dbar ± 0.1% f.s. (standard)
<b>Battery type</b>	Lithium iron phosphate (LiFePO4)
<b>Battery capacity</b>	sufficient for up to 200 operations
<b>Type of water sampler</b>	Plastic Water Sampler PWS, capacity 1.7 l (various sampler capacities are available upon request)

## ORDERING INFORMATION

Products	
<b>436 990</b>	<b>Single Fire Module</b> , digital standard model equipped with 1 Plastic Water Sampler PWS, capacity 1.7 l for combined online/offline use, serial RS-232 port and long-distance FSK-telemetry, Motor Unit with microprocessor, integrated lithium-ion batteries, integrated pressure sensor, battery powered Hand Unit Windows based OceanLab 3 software included
<b>436 991</b>	<b>Single Fire Module</b> , analogue model for control by CTD equipped with 1 Plastic Water Sampler PWS, capacity 1.7 l, Motor Unit with analogue electronics, analogue interface, integrated lithium-ion batteries
<b>436 992</b>	<b>Single Fire Module</b> , digital model for control by CTD equipped with 1 Plastic Water Sampler PWS, capacity 1.7 l, Motor Unit with microprocessor, serial RS-232 port, integrated lithium-ion batteries