



# TECHNOLOGY IN SEARCH OF NEW DEPTHS MISS

## MINI water SAMPLING SYSTEM based on NISKIN bottles

This MISS sampling system accept up to five (5) NISKIN bottles of different capacities (0.8, 1.5, 2.1 Liter each) and comes complete with a RS232/RS485 digital interface and a simple protocol that allows to control the bottle firing operations.



The NISKIN bottles are closed in sequence starting from bottle 1 to bottle 5. The MISS integrates a rechargeable battery pack to power the sampling system and optionally the interfaced CTD.

Alongside the five bottle is installed an IDRONAUT OCEAN SEVEN CTD, (*OS310, OS316Plus or OS320Plus*) which takes control of the MISS sampling system operations and provides real-time measurements from the installed sensors like but not limited to: *Pressure, Temperature, Conductivity, Salinity, pH, Dissolved Oxygen, Redox, Turbidity, Chlorophyll-a.*

The OCEAN SEVEN 3xx CTD fire (close) the NISKIN bottles autonomously in function of Time step, Pressure step or if a certain environmental condition is detected, like the modification of one of the physical (C,T,D) or chemical (pH, DO<sub>2</sub>) water properties.

Moreover, it is possible to fire the bottles in real-time when the OCEAN SEVEN 3xx CTD is controlled through the IDRONAUT data telemetry system or by means of a RS232 cable (max. 200m long).

### Performances

- ❖ 5x NISKIN Bottles 0.8, 1.5 or 2.1 Liters each
- ❖ Maximum depth: 2000 m
- ❖ External power supply 12VDC @ 30 mA
- ❖ Internal rechargeable battery pack (12x1.2V NiMH cells, 5Ah), endurance about 80 hours with OS310 CTD.
- ❖ Interface RS232 or RS485 (9K6 bps).
- ❖ Simplified communication protocol which allows integration with third part of the MISS as an OEM off-the-shelf component.
- ❖ Weight: about 17 Kg (5 bottles without CTD)
- ❖ Height: 90 cm including the hanging rod and the lower titanium protective cage



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