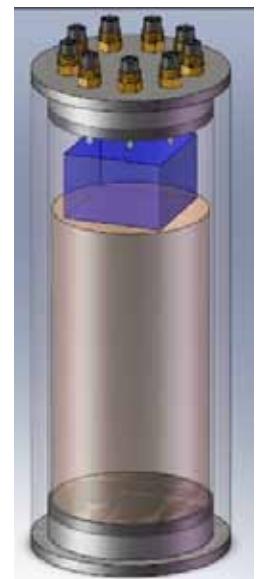


# UW SmartDI

## Subsea Datalogger V3



<b>Hardware</b>	Embedded ultra-low power controller • Watchdog • High precision real-time clock • Rough hardware design
<b>Firmware</b>	SmartDI™ embedded multitasking real-time System
<b>Memory</b>	128 MB RAM • 2 GB CompactFlash • Up to 5+ years data logging
<b>Interfaces</b>	4x RS-232 or RS-485 interfaces • Output configurable to ASCII NMEA-0183 data format
<b>Analogue</b>	8 channel 24 Bit (18 Bit effective) inputs, $\pm 20\text{mV}$ to $\pm 10\text{V}$ , 0/4-20mA • Expandable
<b>Digital</b>	Optionally: 12 digital-in/out/counter • Solid-state-relays with 0-40V 4A drive (more on request) • Expandable to other IO-modules (1W each – e.g. longer housing)
<b>Preprocessing</b>	180+ Calibrate – and standard formulas following IEEE and UNESCO • Virtual channels with independent configurations (e.g. sample rates) • Simulations quality validating, error and spike detection; statistical values • QS data flagging
<b>Specials</b>	Optionally: GPS position-control (Geo correlation) • Soft-PLC fully programmable to any production process • Event/alert control
<b>Telemetry</b>	online / offline over RS-232/485 with CRC checksum from CCITT • Data format Binary compressed or ASCII / NMEA-0183 • Optionally: Telemetry modules (GSM/GPRS/UMTS, WLAN, Ethernet, Bluetooth, IRIDIUM, Radio etc.) on request.
<b>Connectivity, Data exchange</b>	Serial lines for more than 50 probes, meteorology's, automatic sampler and analyzers of different manufacturers (AADI Aanderaa, Bbe MOLDEANKE, CONTROS, FSI, GPS NMEA-0183, RDI, Seabird, Sea&Sun, SYSTEA, TriOS, Turner, WTW, various meteorology, etc. • Huge data-memory via CF-card exchange • Expandable with RS-485 Bus for external acquisition modules.
<b>Power</b>	+9...+32 VDC • Low-power 2W • each add. digital or analogue module app. 1W • Power-management available • External Li-Ion PowerPacks available
<b>Operating</b>	-20°C..+70°C • Shock 10G 11ms
<b>Operational depth</b>	2000m, 4000m, 6000m options submergible titanium housing
<b>Housing</b>	90 OD x 380 mm length, Titanium (2000m, 4xRS232/485)
<b>Connector</b>	SUBCONN® micro connectors MCBH-5 • Others on request



*Image right: Complete Subsea system consists of extended Datalogger with 10x RS232 interfaces and a 117Ah Li-Ion battery*