

## Subsea SmartDI<sup>®</sup> Datalogger

### Multifunction data logger



Specification	
<b>Hardware</b>	Embedded ultra-low power PC-compatible controller • Hardware watchdog • High precession real-time clock • Stable hardware design
<b>Firmware</b>	SmartDI <sup>®</sup> embedded multitasking real-time System
<b>Storage</b>	2 GB industrial grade CompactFlash • Up to 5+ years data logging
<b>Serial Interfaces</b>	4x RS-232 • Option RS-485 • Output configurable to ASCII NMEA-0183 data format
<b>Analogue</b>	8x 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 – needs longer housing)
<b>Processing</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>GPS</b>	Optionally GPS position-control (geo correlation) • Acquisition control by position
<b>PLC controller</b>	Optionally Soft-PLC programmable for any processes • Event/alert control
<b>Real-time Output</b>	Realtime RS-232 or 485 • Data format ASCII NMEA-0183 • Optionally: Telemetry modules (GSM/GPRS/UMTS, WLAN, Ethernet, Bluetooth, IRIDIUM, Radio etc.)
<b>External Sensors</b>	Interfaces for more than 50 probes, meteorology's, automatic sampler and analyzers of different manufacturers (AADI Aanderaa, Bbe MOLDEANKE, FSI, GPS, RDI, Seabird, Sea&Sun, SYSTEA, TriOS, Turner, WTW, various meteorology, etc. • Expandable with RS-485 Bus for external acquisition modules.
<b>Power</b>	+9...+32 VDC • Low-power 3W (250mA @12V) • each add. digital or analogue module app. 1W • Power-management available • External Li-Ion PowerPacks available
<b>Operating</b>	-20°C ... +50°C • Shock 10G 11ms
<b>Operational depth</b>	300m, 2000m, 4000m, 6000m
<b>Housing</b>	Titanium $\varnothing 90\text{mm} \times 380\text{mm}$ – basic version 4xRS232 Titanium $\varnothing 168\text{mm}$ (300m), $\varnothing 180\text{mm}$ (deep sea) – other
<b>Connector</b>	SubConn <sup>®</sup> micro connectors MCBH-5 • Others on request
	<i>Image right: Complete Subsea system consists of extended Datalogger with 10x RS232 interfaces and 14V 140Ah Li-Ion battery, with control light</i>

