

HydroC™ / PowerPack

Smart Li-Ion Technique

The HydroC[™] PowerPack provides energy for deep-sea and shallow-water instrumentations. The innovative Li-lon cells give the highest performance at deep temperatures. For economical reasons Alkali Manganese batteries and Ni-Cd storage batteries are provided as well. With the SmartDI™ Controller / Datalogger as the heart, many different sensors, a power management and a data transmission as a complete monitoring system is realized.

Due to the excellent characteristics, the HydroC™ / PowerPack is best used for off-shore (ODAS = Ocean Data Acquisition System) and underwater / artic applications as well as under other extreme conditions. The housing is compatible with the "Long-John" HydroC[™] sensor family. User defined sizes on request.

Setup example, please contact us for your requirements

Rough Housing Titanium Ø 90 mm, L 500mm "Long-John", other on request Weight 7.1 kg ("Long-John" Housing up to 4000m, Titanium 41.4 Ah) SUBCONN® Micro connector MCBH5F, other on request Connector

Operating depth 2000, 4000, 6000 m

-20°C ... +60°C Temperature Operating temperature

> 0°C ... +40°C Charge temperature -20°C ... +50°C Storage temperature

14.8 V Open voltage Voltage

Typical voltage 14.0 V

Minimal voltage 12.0 V (to give full performance, absolute min. 9V)

41.4 Ah (> 0°C, fresh cells) Capacity Maximal capacity

(0°C, after 100 cycles) Typical capacity 38 Ah

Low temperature 32 Ah (-20°C)

(6000m version with 30Ah due to the pressure housing limitations)

Li-Ion high-power cells Cell type

9 A max to protect the wires and connectors (on request up to 60A) Current

Rechargeable Under Water! 20 % per year at +25°C, 10% per year at 0°C Self discharge

500 cycles for 80% remaining capacity Charge cycles

Protection Internal PowerPack protection for:

Over-charge (17,4V),

Under voltage discharge (9 V), Current limiting (9 A after 1s) Short current protection

Charging Smart Charger, can be connected all time.

> Typical charging time approx. 5 hours due to temperature limitations. Charging under water is possible! No need to open the housing!

HydroC[™] sensor family for CH₄, CO₂, Oil-in-Water (PAH), H₂S, MEG Related products

OceanLine sensor family for oceanographic, hydrographical parameters

SmartDI Subsea Datalogger / Control units

SubSea Monitoring Station



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