# VITROVEX<sup>®</sup> battery module

High-Performance rechargeable Li-Ion PowerPack<sup>®</sup> installed in a VITROVEX<sup>®</sup> 13" glass sphere for full ocean depth.





#### SCOPE OF SUPPLY Pressure housing VITROVEX 13" instrument sphere, 7,000m or 12,000m depth rating. Battery High-Performance Li-Ion rechargeable PowerPack® by SubCtech with SubConn® BH6F power output port inclusive dummy plug. High quality A grade cells, UL and UN T38.3 certified and type-tested to MIL-STD 810G and ISO 13628-6 Non-gassing No capacity loss at high current Long shelf life Modest capacity loss at low temperatures Battery charger Automatic high-power Li-Ion battery charger with micro-controller and SubConn<sup>®</sup> BH5M charge port incl. dummy plug. Waterproof as per IP65

Protects from memory effect

#### Recommended temperature conditions

Operating	-20°C to +60°C
Charging	+10°C to +45°C
Storage	-20°C to +50°C



# VITROVEX<sup>®</sup> battery module



### High-Performance rechargeable Li-Ion PowerPack<sup>®</sup> installed in a VITROVEX<sup>®</sup> 13" glass sphere for full ocean depth.

OPTIONS BMS	Battery Management System (voltages, current, temperature, SOC, diagnostic) with data acquisition and interface, incl. 24 Bit high-res data acquisition, RS-232 or RS-485 interface (other on request) and configurable NMEA-0183 (simple ASCII) data protocol. Connection and communication with Battery Module by SubConn <sup>®</sup> BH10F management port inclusive dummy plug.
Remote On/Off	To switch Battery Module or just BMS electronic on or off. Low-resistance and low-power dissipation for best performance.
High-current output	20A or 30A, high current is for peak or short time only. Current must be limited between 10A to 20A maximum continuously.
OceanView®	Configuration software for BMS

### SPECIFICATION

The arrangement of batteries can be in three layers with three different configurations each.

Rated Voltage	14.4V	25.2V	50.2V
Rated Capacity	21Ah to	332 Ah	
Rated Power	1123 Wh	n to 5065 Wh	1
Weight of Batteries	6,5kg	17kg	23.5kg
Weight in air	15kg	25.5kg	31.5kg

	LEVEL 1			LEVEL 1+2			LEVEL 1+2+3		
Rated Voltage	14.4V	25.2V	50.2V	14.4V	25.2V	50.2V	14.4V	25.2V	50.2V
Rated Capacity	101Ah	57Ah	27Ah	221Ah	134Ah	74Ah	332Ah	201Ah	101Ah
Rated Power	1,447Wh	1,435Wh	1,351Wh	3,184Wh	3,377Wh	3,714Wh	4,776Wh	5,065Wh	5,065Wh
Weight of Batteries	6.5kg	6.5kg	6.5kg	17.0kg	17.0kg	17.0kg	23.5kg	23.5kg	23.5kg
Total weight in air	15.0kg	15.0kg	15.0kg	25.5kg	25.5kg	25.5kg	31.5kg	31.5kg	31.5kg

The PowerPack<sup>®</sup> can be accommodated by various types of VITROVEX<sup>®</sup> glass housings to meet specific demands in terms of voltage, capacity and buoyancy. A 17" VITROVEX<sup>®</sup> glass sphere for example could increase the power to approx. 11 kWh at 14.4V and 825 Ah.

Please consult Nautilus Marine Service to cover your selected needs.

