

# L I T E Marine Battery Range

freedom W O N	Marine 5/4	Marine 10/8	Marine 20/16	Marine 30/24
Total Energy [kWh]	5	10	15	20
Nominal Voltage [V]	Available in 13V, 26V and 52V options			
Max/Cont. Discharge Current [A] (2)	300/240	300/240	480/400	400/480
Max/Cont. Charge Current [A]	100	200	400	600
Max. Daily DoD Suggested (average) %	80% DoD			
80% DoD Energy [kWh]	4	8	16	26
Round Trip Efficiency [%]	96 - 98			
Weight [kg]	55	110	205	305
Dimensions [mm] Height x Width x Length (including end handles or eye bolts) [mm]	220 x 300 x 978	340 x 400 x 886	340 x 400 x 1462	340 x 580 x 1462
Enclosure	Aluminum – power coated, tamper proof, waterproof IP65, corrosion resistant, handles or eye bolts for lifting, rubber feet			
DC Connection Cables per +ve and -ve (std length 1.8m)	1 x 50 mm <sup>2</sup>	1 x 50 mm <sup>2</sup>	2 x 50 mm <sup>2</sup>	2 x 50 mm <sup>2</sup>
External Interfacing	CAN Bus			
On-board Management	Full battery management system and internal trip protection			
Human Interface	Serial RS232 Plug for Programming and data access with PC, main breaker, error reset button, SoC display, error light			
Protetion	Shunt trip circuit breaker sized to suit max current, can be tripped by BMS if critical fault, manual reset. Protection for overcurrent, cell under and over voltage, temperature, weak cell detection and other critical event			
Form Factor	Large format, ultra-heavy-duty prismatic cells of 200Ah each and 3,2V nominal voltage, fully sealed in plastic casing with bolt on electrode connections.			
Battery Cooling	Natural convection (heat generation is negligible inside the battery)			
Suitable Ambient Temp [°C]	0°C to +40°C			
Extreme Operating Temp [°C]	-20°C to +60°C			
Remote Monitoring	Optional: Real time data logging and transmission via WiFi to online portal of key battery information			
Warranty	10 years or 4000 cycles of average 80% DoD, and max 90% DoD			
Service Life	>16 years (>5500 cycles) expected life at 80% DoD, >20 years (>7500 cycles) at 50% DoD			

Contact us for pricing:

021 851 1700 | [www.ExSolar.co.za](http://www.ExSolar.co.za) | [Energy@ExSolar.co.za](mailto:Energy@ExSolar.co.za)

- 1) DoD = Depth of Discharge max allowable 90% DoD, recommended 70% average daily DoD of extended life, 50% DoD for optimal life.
- 2) Contact Freedom won for information on the High Power (HP) upgrade options, should more power be required.
- 3) End of Life (EoL) defined as battery dropping to 70% of Beginning of Life (BoL) capacity.

