



ADVENTURE

Main Battery Bank:

<u>Manufacturer:</u> DBS Leoch	<u>Type:</u> LRC2-1000 Lead Carbon	<u>Quantity:</u> 24 x 2V Cells
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- The boat's 48V primary power source is supplied by 24 individual lead carbon cells.
- Each cell is rated at 2V/1000Ah with all 24 wired in series, providing a total power supply of 48V/1000Ah.
- This DC supply is used to provide power to:
 - 2 x 8kW DC motors for propulsion
 - the boats domestic DC supply (12V & 24V via converters)
 - and a 5kVA Victron Multiplus II inverter/charger. The inverter/charger is used to generate 230V AC supply for cabin heating (via electric radiators) and a 10 litre hot water heater. It is also used to charge the 24 lead carbon cells when connected to a suitable shore supply
- The battery bank has been sized to enable approximately 8 hrs cruising at 3 to 4mph

Electrical Propulsion:

<u>Manufacturer:</u> Lynch Motors	<u>Type:</u> LMC 200-D135 - Swordfish 16kW Twin Motor Drive	<u>Rating:</u> 2 x 8kW
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- Voltage: 48V DC
- Current: 180 A
- Peak Current: 350A
- Peak Power: 30KW
- Rated Speed Engine: 2160 RPM
- Rated Torque: 72 Nm
- Speed Constant: 45 RPM/V
- Peak Torque: 144 Nm

Solar Array:

<u>Manufacturer:</u> Photonic Universe	<u>Type:</u> 350W Semi-flexible textured fibreglass (FLPRO-350M)	<u>Quantity:</u> 6
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- There are 6 photovoltaic solar panels installed on the roof area.
- Each is rated at 350W (max) with a maximum voltage of 39.1V and an output current of 8.7A.
- The 6 panels are arranged in a series and parallel configuration giving an overall, maximum solar array output of 78.2V/26.1A (2.1 kW total).
- The combined output of the solar array is then connected to a Victron MPPT (Maximum Power Point Tracking) controller which optimises the connection between the solar panel array and the 48V battery bank, regulating the voltage to avoid damage.

Bow Thruster:

<u>Manufacturer:</u> Vetus	<u>Type:</u> Bow Pro B 65kgf Brushless	<u>Rating:</u> 3.1 kW
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Wheelchair Lift:

<u>Manufacturer:</u> Edmolift	<u>Type:</u> TCM 2000 Single Scissor Mechanism Platform Lift	<u>Capacity:</u> 500 Kg
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DESIGNED AND BUILT BY:

