

SPECIFICATION SHEET

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| Freedom Lite | Home  5/4 | Home  10/8 | Home 15/12 | Home 20/16 | Home 30/24 | Business 40/32 | Business 60/48 | Business 80/64 |
| Total Energy Capacity [kWh] | 5 | 10 | 15 | 20 | 30 | 40 | 60 | 80 |
| Energy, 80% DoD [kWh] (1) | 4 | 8 | 12 | 16 | 24 | 32 | 48 | 64 |
| Energy, 90% DoD [kWh] | 4,5 | 9 | 13,5 | 18 | 27 | 36 | 54 | 72 |
| Current Capacity [Ah] | 100 | 200 | 300 | 400 | 600 | 800 | 1200 | 1600 |
| Max & Cont. Charge Current [A] (2) | 100 | 200 | 300 | 400 | 600 | 600 | 800 | 800 |
| Max & Cont. Charge Power [kW]  (2) | 5 | 10 | 15 | 20 | 30 | 30 | 40 | 40 |
| Max/Cont. Discharge Current [A]  (2) | 300/240 | 300/240 | 480/400 | 480/400 | 750/600 | 750/600 | 1000/800 | 1000/800 |
| Max/Cont. Discharge Power [kW]  (2) | 15/12 | 15/12 | 24/20 | 24/20 | 38/30 | 38/30 | 50/40 | 50/40 |
| Max Recommended Inverter Total Rated Power (cont.) [kVA] | 10 | 10 | 15 | 15 | 25 | 25 | 35 | 35 |
| Nominal Voltage [V] | 52V, t o suit 48V Inverters, min 47V, max 56V | | | | | | | |
| Weight [kg] | 60 | 108 | 158 | 211 | 310 | 412 | 613 | 811 |
| Dimensions on or against wall - Height x Width x Depth [mm] | 500x  340x290 | 745x  340x290 | 976x  540x265 | 976x  708x265 | 1540x  455x370 | 1895x  584x310 | 1895x  859x310 | 1895x  1142x310 |
| Enclosure | Aluminium – powder coated white front, rated for indoor u se | | | | | | | |
| DC Connection - Integrated Cables, [no. per electrode] (3) | 2  1x 50mm | 2  1 x 50mm | 2  2 x 50mm | 2  2 x 50mm | 2  2 x 95mm | 2  2 x 95mm | 2  2 x 95mm | 2  2 x 95mm |
| Control Interface | RJ45 Socket x 2 – CAN Bus for Interfacing with Compatible Inverters and System Controllers, connection of parallel batteries. | | | | | | | |
| Protection | Shunt Trip Circuit Breaker sized to suit max current, can be tripped by BMS if critical fault, manual reset. Includes overcurrent, cell under and over voltage, temperature, weak cell detection, minimum SOC control | | | | | | | |
| Human Interface | State of Charge Display (0 to 100%), Error light, Error Reset Button, Serial RS232 Plug for Programming (note the Lite 80/56 has a CAN port for programming and not a serial port), WiFi remote monitoring (optional accessory) | | | | | | | |
| Warranty [4] | 10 years or 4 000 cycles for average 80% DoD, and max 90% DoD | | | | | | | |
| Service Life [4] | >16 years (>5 500 cycles) expected life at 80% DoD (1), >20 years (>7 500 cycles) at 50% DoD | | | | | | | |
| Essential Accessories | Note that for connecting the battery to a PC a special adapter is required:   Lite 5/4 up to Lite 60/42 - Serial RS232 to USB adapter (must be the brand supplied by Freedom Won)  Lite 80/56 - CANdapter (available from Freedom Won) (supplied with battery)  CAN Bus Termination Resistor – one required per battery, available from Freedom Won (not included with battery) | | | | | | | |

Notes to Specification Sheet:

1. DoD = Depth of Discharge, recommended 80% DoD for average daily discharge, 70% DoD on average for optimal life – max for normal operation 90% DoD, max for system in standby 100% DoD.
2. Max load duration – 5 minutes per 30-minute cycle. 2 x Max overload can be handled for 2 seconds.
3. Fly Leads 1,8m long, power cable Red = Positive, Black = Negative, conductors in table refer to one electrode i.e. per positive and negative connections
4. End of Life (EoL) defined as cell dropping to 60% of Beginning of Life (BoL) capacity for expected life and 70% of BoL capacity for warranty. This warranty applies to Lites sold after 1 September 2019. For Lites sold prior please contact Freedom Won for warranty information.

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