



## LiTE Home 20/16

Total Energy Capacity [kWh]	20
Energy, 80% DoD [kWh] <sup>1</sup>	16
Energy, 90% DoD [kWh]	18
Current Capacity [Ah]	400
Maximum Charging Power [kW]	20
Maximum Continuous Charging Current [A]	400
Maximum Charging Current [A]	400
Maximum Discharging Power [kW] <sup>2</sup>	24
Maximum Continuous Discharging Current [A] <sup>2</sup>	400
Maximum Discharging Current [A]	480
Nominal Voltage [V]	51.2Vd.c. to suit 48V Inverters, min 47V, max 56V
Maximum Recommended Inverter Total Rated Power (cont.) [kVA]	15
Battery Dimensions – H x W x D [mm] <sup>3</sup>	745x640x290
Battery Weight [kg]	173
DC Connection – Fly Leads (no. per electrode) [mm <sup>2</sup> ] <sup>4</sup>	2x50mm <sup>2</sup> Permopower
Enclosure	Aluminium enclosure painted white, for use indoors or fully protected under-cover environments, rated to IP20
Protection	The Freedom Won Battery is equipped with Dual Shunt Trip Circuit Breakers that break both the positive and negative DC connection. The breakers are appropriately sized for the maximum current and can be triggered by the BMS in the event of a critical fault, requiring a manual reset. The system also incorporates comprehensive protection features, including overcurrent protection, cell under/over voltage monitoring, temperature regulation, weak cell detection, and minimum State of Charge (SoC) control
Control Interface	USB Serial protocol for troubleshooting & RJ45 CAN Bus for BMS & inverter communication
Human Interface	State of Charge display (0 to 100%), Error light, Error Reset button, USB plug for programming
Warranty <sup>5</sup>	Standard Warranty: 10 years or 6000 cycles for average 80% DoD
Service Life <sup>5</sup>	>16 years (>6000 cycles) expected life at 80% DoD <sup>1</sup>
Authentication and Certification	UN38.3 / IEC62619:2017 / IEC61000-6-1:2019 / IEC61000-6-3:2021 / IEC62040-1:2017/AMD1:2021
Country of Manufacture	South Africa
Essential Accessories	Note that for connecting the battery to a PC a USB “printer” cable is required (one is supplied with each battery) CAN Bus Termination Resistor – one required per battery (one included with battery) CAN Bus Cable (RJ45 LAN Cable) – one required per battery (not supplied with battery). Note some inverters will require a special (non-standard pin configuration) cable – see installation manual

### WARNING LABELS:

**General Warning**  
Handle lithium batteries with care. Avoid physical impact, exposure to extreme temperatures, and punctures. Use only approved chargers and ensure proper disposal by recycling at designated centers.

**Danger: Electric Shock**  
To prevent electric shock, handle equipment with dry hands and use insulated tools. Avoid short circuits by not connecting positive and negative terminals directly. Read the instruction manual for safe operation, regularly inspect equipment for proper functioning, wear gloves and safety glasses when working with electrical components, always disconnect power before repairs, and keep devices away from moisture.



### Do Not Bin

Do not dispose of batteries in regular waste as they pose a fire hazard. Recycle at designated centers, cover terminals with tape to prevent short circuits, store used batteries in a cool, dry place, and comply with local disposal regulations.

### Notes to Specification Sheet

1. DoD = Depth of Discharge, recommended 80% DoD for average daily discharge, max for normal operation 90% DoD, max for system in standby 100% DoD.
2. Max current duration 5min every 10min. 1.5 x Max overload can be handled for 5 seconds. Current limits are rated for 10°C to 25°C battery temperature. Derating will apply outside this temperature range. For adherence to Standard Warranty requirements these current limits must be reduced to 0.25C for charge and 0.5C for discharge (C being the Ah capacity).
3. Dimensions on or against wall excluding protruberances such as glands and breaker handle.
4. 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.
5. End of Life (EoL) defined as cell dropping to 60% of Beginning of Life (BoL) capacity. This warranty applies to LiTE units sold after 1 April 2024. For LiTE units sold prior please contact Freedom Won for warranty information.

### DISTRIBUTORS AND RESELLERS

Contact your nearest Accredited Freedom Won Distributor or Accredited EPCs for further sales and technical support.

Plug into The Current Future

[www.freedomwon.co.za](http://www.freedomwon.co.za)