

LFELi 48100W3 - Multi-protocol

LiFePO4 5120Wh specifications sheet



FEATURES



- **Longer Cycle Life** - Offers up to 20 times longer cycle life & 5 times longer calendar life than lead acid batteries, minimizing replacement cost.



- **Superior Safety** - Lithium Iron Phosphate chemistry eliminates explosion risk or combustion due to high impact, overcharging or short circuit situation. First life battery.



- **Higher usable capacity** - Delivers high power, while maintaining cycling of double energy capacity of lead acid battery.



- **Wider Temperature Range** - $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$.



- **Lighter Weight** - About 40% of the weight of a comparable lead acid battery. A 'drop in replacement' for lead acid batteries.



- **Multi-protocol communication** - Multiple protocols that can be selected via PC with an included RS232 cable.



Solar/wind Energy Storage



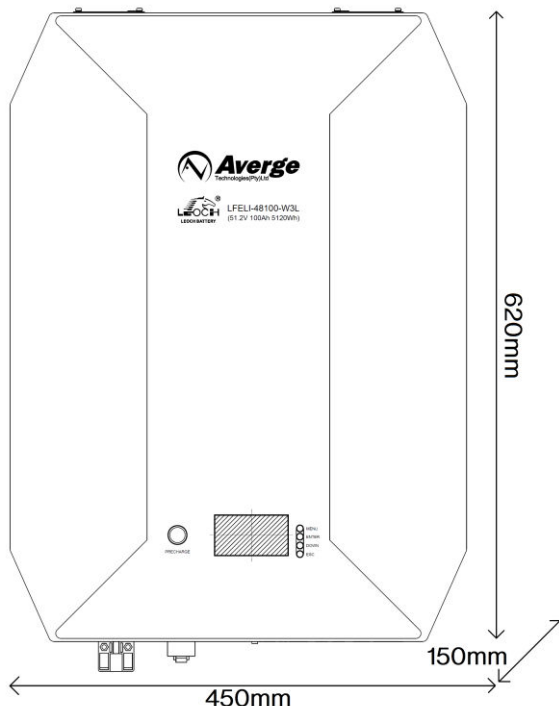
Caravan power



Power tools



Backup power for UPS systems



Model:	LFELi 48100W3
Nominal voltage:	51.2V
Nominal Capacity:	100Ah
Energy:	5120Wh
Voltage range:	48~55V (limit: 45~57.6V)
Internal resistance:	<50mΩ
Cycle life:	>3500 cycles @ 100% DOD 25 °C
Self discharge per month:	<3%
Charge voltage:	57V (±0.6V)
Charge current:	Recommended 20~50A
Max Discharge current:	100A Continuous (120-130A Pulse) [1C]
Communication:	CAN or R485 (+RS232 to USB)
Temperature Range:	-20~60 °C

E-mail JHB: sales@averge.co.za

Address JHB : 16B Axle Drive Clayville, Olifantsfontein

Website: www.averge.co.za

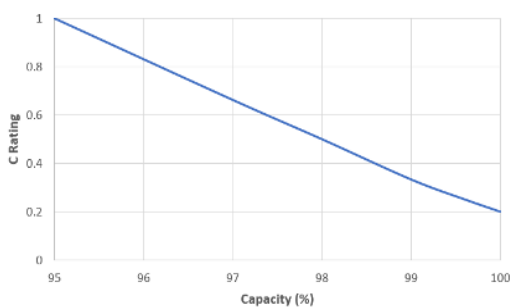
E-mail CPT: salescpt@averge.co.za

Address CPT: unit 4, 4 Warbler Close, Montague gardens

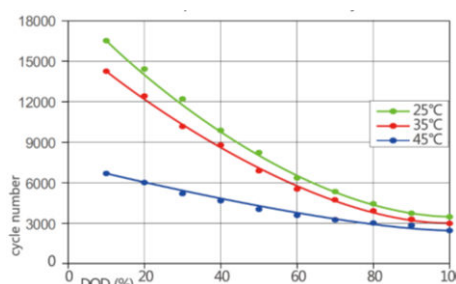
Tel JHB: +27 (0) 12 450 0940

Model:	LFELi-48100W3
Charge:	
Rated Voltage:	51.2V (47.8V ~ 55V) [16 Cell]
Range Limit:	[45V ~ 57.6V _{Max}]
Recommended Charge Setting:	Bulk/Boost/Absorption: 57V Float: 55V
Cut-off:	48~50V (without communication) 5-20% (with SOC settings)
Rated Capacity:	100Ah (5120Wh)
Max Charge current:	50A [100A _{Peak}]
Max Discharge current:	100A [125A _{Peak}]
Life:	
Max Cycles (Design life):	More than 16000 Cycles at 10% DOD (more than 20 years)
Min Cycle life (Operating Life):	More than 3500 at 100% DOD (@ 25°C) (more than 9 years)
DOD:	Recommended: 95% _{max} [Note consider connected device's low power consumption]
Features:	
Soft-Start/Pre-charge:	0.1~0.2A (Allows low current start up for inverter such as Victron and Schneider that do not include soft-start) (Inverter capacitor pre-charger)
Built in DC Breaker:	125A DC breaker and power button.
Auto Shutdown:	Low Cell sleep
Over/Under-voltage protection:	Load disconnect
Auto-Recovery:	Recovers: UVP with charge, OVP with discharge and balancing.
Over/Under-Temp Protection:	Charging: 0 to +50°C Discharging: -20 to +50°C Storage: -20 to +60°C
Charge Current Limiting:	To 20A (Settable) [Default activation: 60A, settable]
Warranty:	4-Years (extended 7 year)
Communication:	RS485; RS232; CAN
Flame Retardant:	UL94V-0
Ratings:	IP54; CE-UN38.3; IEC62619; ISO14001; ISO9001
Compatibility:	
Active protocols:	Sunsynk (Deye, Fusion), Schneider, Phocos, EAST, Victron, Lux power, Growatt, SolaX, Goodwe, Imeon Energy, Selectronic, Sofar, Solis, Sungrow, Delios, Sematic
General Data:	
Operating temperature:	15 ~ 35°C (0 ~ 60°C)
Terminals:	Double Poled (rated 125A across terminal)
Max relative humidity:	90%
Net Weight:	49kg
Display:	LCD + LEDs
Alarm:	Led and buzzer (settable)
Unit Dimensions [W×H×D]:	450 × 150(+20) × 620 (mm)

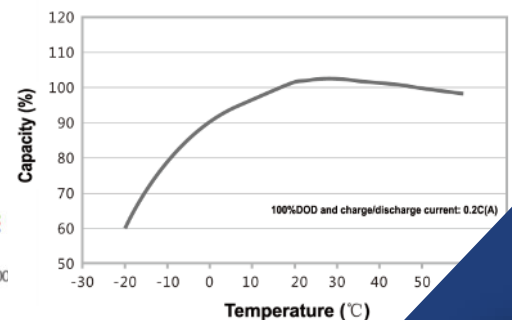
C-Rating in relation to capacity (25°C)



DOD Discharge Cycle Life Curve



Temperature To capacity curve



E-mail JHB: sales@average.co.za

Address JHB : 16B Axle Drive Clayville, Olifantsfontein

Website: www.average.co.za

E-mail CPT: salescpt@average.co.za

Address CPT: unit 4, 4 Warbler Close, Montague gardens

Tel JHB: +27 (0) 12 450 0940