

# 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.



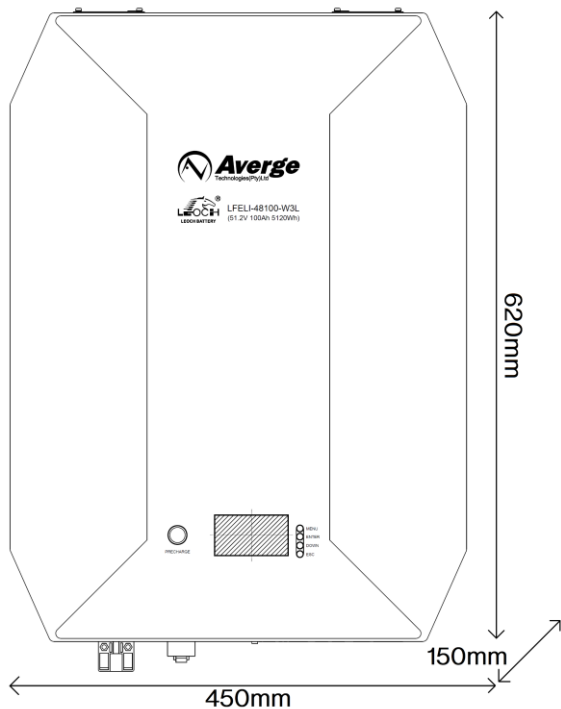
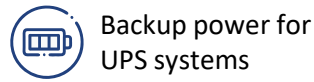
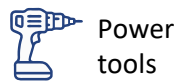
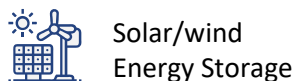
• **Wider Temperature Range** -  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ .



• **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.



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

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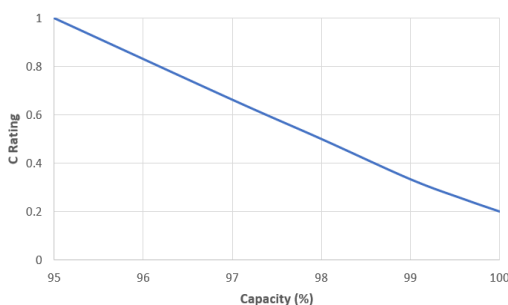
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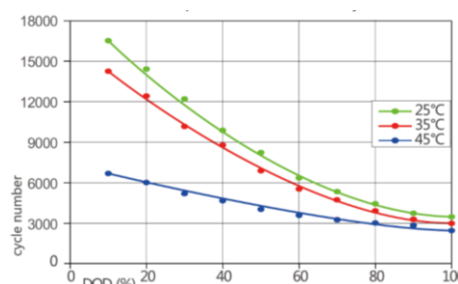
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<b>Model:</b>	<b>LFELi-48100W3</b>
<b>Charge:</b>	
<b>Rated Voltage:</b>	51.2V (47.8V ~ 55V) [16 Cell]
<b>Range Limit:</b>	[45V ~ 57.6V <sub>Max</sub> ]
<b>Recommended Charge Setting:</b>	<b>Bulk/Boost/Absorption: 57V   Float: 55V</b>
<b>Cut-off:</b>	48~50V (without communication)   5-20% (with SOC settings)
<b>Rated Capacity:</b>	<b>100Ah (5120Wh)</b>
<b>Max Charge current:</b>	50A [100A <sub>Peak</sub> ]
<b>Max Discharge current:</b>	100A [125A <sub>Peak</sub> ]
<b>Life:</b>	
<b>Max Cycles (Design life):</b>	More than 16000 Cycles at 10% DOD (more than 20 years)
<b>Min Cycle life (Operating Life):</b>	More than 3500 at 100% DOD (@ 25°C) (more than 9 years)
<b>DOD:</b>	Recommended: 95% <sub>max</sub> [Note consider connected device's low power consumption]
<b>Features:</b>	
<b>Soft-Start/Pre-charge:</b>	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)
<b>Built in DC Breaker:</b>	125A DC breaker and power button.
<b>Auto Shutdown:</b>	Low Cell sleep
<b>Over/Under-voltage protection:</b>	Charge or Discharge circuit disconnect
<b>Auto-Recovery:</b>	Recovers: UVP with charge, OVP with discharge and balancing.
<b>Over/Under-Temp Protection:</b>	Charging: 0 to +50°C   Discharging: -20 to +50°C   Storage: -20 to +60°C
<b>Charge Current Limiting:</b>	To 20A (Settable) [Default activation: 60A, settable]
<b>Warranty:</b>	10-Years (Limited)
<b>Communication:</b>	RS485; RS232; CAN
<b>Flame Retardant:</b>	UL94V-0
<b>Ratings:</b>	<b>IP54; CE-UN38.3; IEC62619; ISO14001; ISO9001</b>
<b>Compatibility:</b>	
<b>Active protocols:</b>	Sunsynk (Deye, Fusion), Schneider, Phocos, EAST, Victron, Lux power, Growatt, SolaX, Goodwe, Imeon Energy, Selectronic, Sofar, Solis, Sungrow, Delios, Sematic
<b>General Data:</b>	
<b>Operating temperature:</b>	15 ~ 35°C (0 ~ 60°C)
<b>Terminals:</b>	Double Poled (rated 125A across terminal)
<b>Max relative humidity:</b>	90%
<b>Net Weight:</b>	49kg
<b>Display:</b>	LCD + LEDs
<b>Alarm:</b>	Led and buzzer (settable)
<b>Unit Dimensions [W×H×D]:</b>	450 × 150(+20) × 620 (mm)

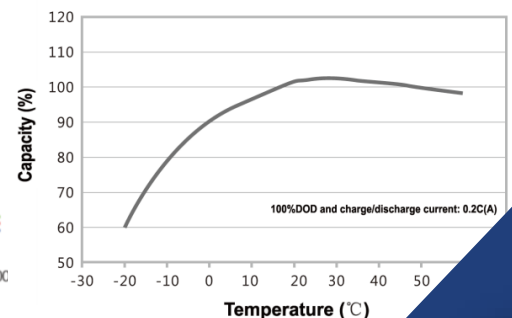
**C-Rating in relation to capacity (25°C)**



**DOD Discharge Cycle Life Curve**



**Temperature To capacity curve**



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