

# LFeli 48100S2- 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



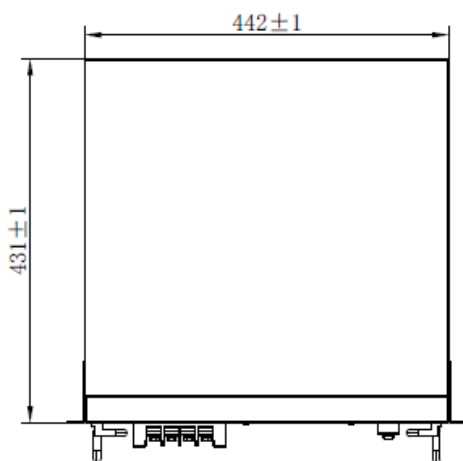
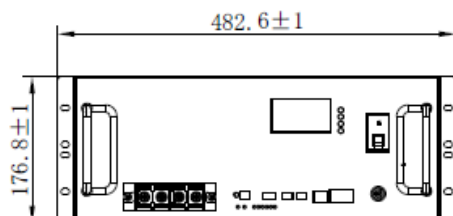
Caravan  
power



Power  
tools



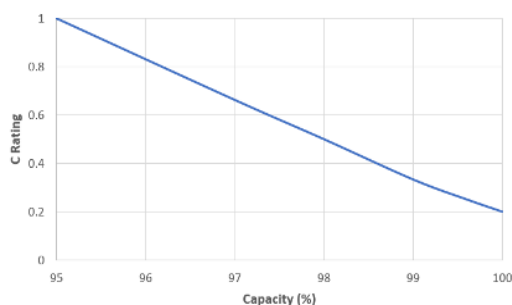
Backup power for  
UPS systems



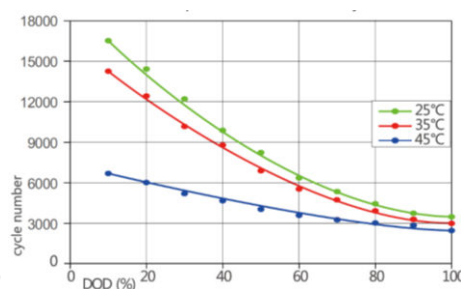
Model:	LFeli 48100S2
Nominal voltage:	51.2V
Nominal Capacity:	100Ah
Energy:	5120Wh
Voltage range:	48~55V (limit: 45~57.6V)
Internal resistance:	<50mΩ
Cycle life:	>3500 cycles @ 100% DOD 25 °C
Self discharge per month:	<3%
Charge voltage:	57V (±0.6V)
Charge current:	Recommended 20~50A
Max Discharge current:	100A Continuous (120-130A Pulse) [1C]
Communication:	CAN or R485 (+RS232 to USB)
Temperature Range:	-20~60 °C

Model:	LFELi-48100S2
<b>Charge:</b>	
Rated Voltage:	51.2V (47.8V ~ 55V) [16 Cell]
Range Limit:	[45V ~ 57.6V <sub>Max</sub> ]
Recommended Charge Setting:	<b>Bulk/Boost/Absorption: 57V   Float: 55V</b>
Cut-off:	48~50V (without communication)   5-20% (with SOC settings)
Rated Capacity:	<b>100Ah (5120Wh)</b>
Max Charge current:	50A [100A <sub>Peak</sub> ]
Max Discharge current:	100A [125A <sub>Peak</sub> ]
<b>Life:</b>	
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% <sub>max</sub> [Note consider connected device's low power consumption]
<b>Features:</b>	
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:	<b>IP31</b> ; CE-UN38.3; IEC62619; ISO14001; ISO9001
<b>Compatibility:</b>	
Active protocols:	Sunsynk (Deye, Fusion), Schneider, Phocos, EAST, Victron, Lux power, Growatt, SolaX, Goodwe, Imeon Energy, Selectronic, Sofar, Solis, Sungrow, Delios, Sematic
<b>General Data:</b>	
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]:	442 × 177 × 431 (mm)

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



**DOD Discharge Cycle Life Curve**



**Temperature To capacity curve**

