



POWER YOUR LIFE, LAST LONGER

## ELB ENERGY GROUP (SHENZHEN)LIMITED

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ELB

## SLA REPLACEMENT BATTERY





BLUETOOTH® ENABLED

## BATTERY FEATURES

- Super safe lithium iron phosphate (LiFePO<sub>4</sub>) chemistry reducing the risk of explosion or combustion due to high impact, over-charging or short circuit situation.
- Bluetooth® communication capability for battery status through ELB app.
- Battery Management System (BMS) controls the parameters of the battery to provide optimum safety by protecting against over-charging and over-discharging.
- BMS enhanced design balances the battery cells, optimizing battery performance.
- Delivers twice the power of lead acid batteries, even at high discharge rates, while maintaining high energy capacity.
- Faster charging and lower self-discharge.
- Up to 10 times more cycles than lead acid batteries.
- Compact and only 40% of the weight of comparable lead acid batteries.

The SLA replacement series LiFePO<sub>4</sub> battery has the same standard structural specifications as of the lead-acid battery, comparatively having the advantages of high safety, good reliability, long cycle life, good high/low temperature performance, etc. With these unique advantages, it has been using in a wide range of application scenarios, such as RV, sightseeing carts, marine, scooters, tricycles, emergency lighting, and security monitoring. The LiFePO<sub>4</sub> battery is an ideal drop-in replacement solution for the traditional lead-acid batteries used on the existing market.

ELB SLA Replacement series batteries offer BMS controlled safety, long life, fast-charging performance (Optional Bluetooth function, which can real-time Bluetooth Access to battery SOC, Voltage, Current, Temperature status). The BMS embeds smart balancing algorithms that control all cell voltages in the battery, making sure they are constantly at the same voltage level, optimizing battery capacity.

## INTELLIGENT BMS PROTECTION FUNCTION



Cell  
Balance  
Protection



Over  
Temperature  
Protection



Over  
Discharge  
Protection



Over  
Charge  
Protection



Over  
Load  
Protection



Over  
Current  
Protection

TECHNICAL DATA

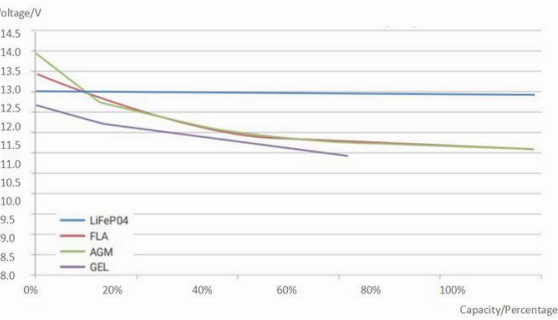
Model	ELB T6-LFP	ELB T10-LFP	ELB T50-LFP	ELB T75-LFP	ELB T100-LFP
General characteristic					
Norminal Voltage	12.8V	12.8V	12.8V	12.8V	12.8V
Norminal capacity	6AH	10AH	50AH	75AH	100AH
Norminal energy	76.8WH	128WH	640WH	960WH	1280WH
Dimension(L*W*H, MM)	151*65*94	151*98*101	229*138*208	260*168*210	330*170*216
Approx.weight	0.8KG	1.3KG	6.3KG	9.3KG	11KG
Case	ABS				
Material	LiFePO4				
Electrical characteristics					
End of charge voltage	14.6V				
End of discharge voltage	10V				
Standard charge current (0.5C)	3A	5A	25A	40A	50A
Standard discharge current (0.5C)	3A	5A	25A	40A	50A
Max pulse discharge current	6A	10A	50A	80A	100A
Internal resistance	80mΩ	70mΩ	60mΩ	60mΩ	50mΩ
IP rating	IP64	IP64	IP64	IP64	IP64
Operating temperature(charge)	0℃ ~ 55℃				
Operating temperature(discharge )	-10℃ ~ 55℃				
Storage temperature	-20℃ ~ 60℃				
Cycle lfe	>4000 times(25℃@80%DOD,0.2C)				
Additional	Down the detail datasheet and use manuel from official website: <a href="https://www.ecolithumbattery.com/resources/">https://www.ecolithumbattery.com/resources/</a>				

TECHNICAL DATA

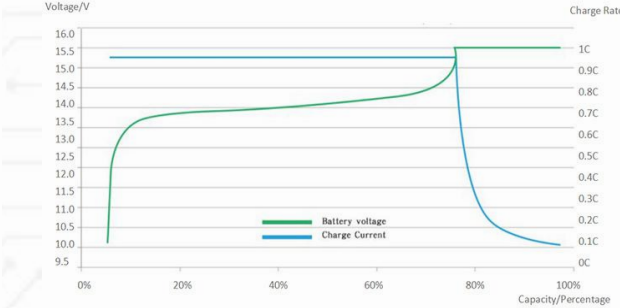
Model	ELB T120-LFP	ELB T150-LFP	ELB T200-LFP	ELB T300-LFP	ELB W100-LFP
General characteristic					
Norminal Voltage	12.8V	12.8V	12.8V	12.8V	25.6V
Norminal capacity	120AH	150AH	200AH	300AH	100AH
Norminal energy	1536WH	1920WH	2560WH	3940WH	2560WH
Dimension(L*W*H, MM)	345*190*250	521*268*228	521*268*228	521*268*228	521*268*228
Approx.weight	14.7KG	22G	24KG	35KG	24KG
Case	ABS				
Material	LiFePO4				
Electrical characteristics					
End of charge voltage	14.6V				
End of discharge voltage	10V				
Standard charge current (0.5C)	60A	80A	100A	100A	50A
Standard discharge current (0.5C)	60A	80A	100A	100A	50A
Max pulse discharge current	120A	150A	200A	200A	100A
Internal resistance	45mΩ	40mΩ	35mΩ	30mΩ	50mΩ
IP rating	IP64	IP64	IP64	IP64	IP64
Operating temperature(charge)	0°C ~ 55°C				
Operating temperature(discharge )	-10°C ~ 55°C				
Storage temperature	-20°C ~ 60°C				
Cycle lfe	4000 times(25°C@80%DOD,0.2C)				
Additional	Down the detail datasheet and use manuel from official website: <a href="https://www.ecolithumbattery.com/resources/">https://www.ecolithumbattery.com/resources/</a>				



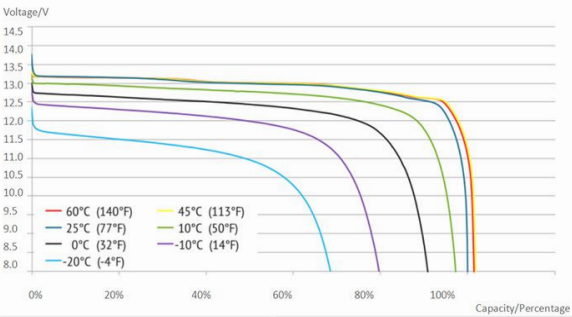
PERFORMANCE CHARACTERISTICS



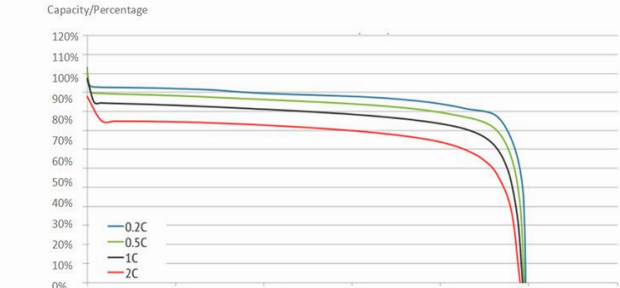
Discharge voltage Characteristic at different Rate@25°C



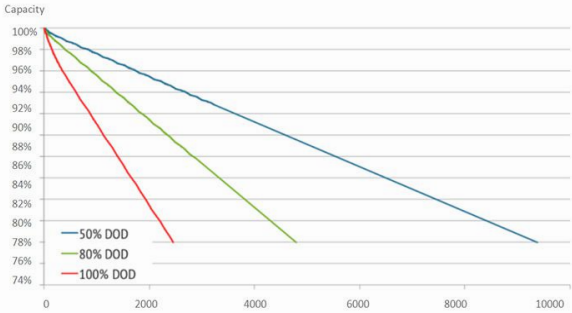
Charging characteristic (0.2C @ 25°C)



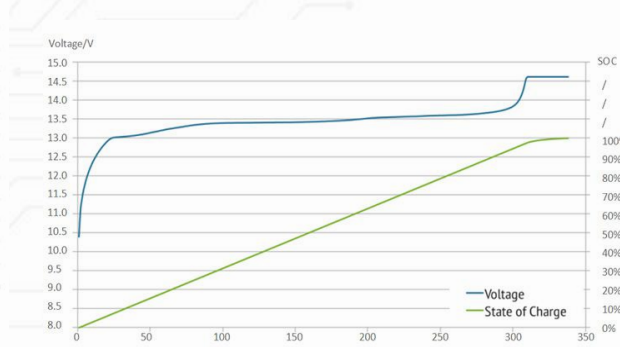
Discharge voltage Characteristic at different Temperature



Capacity of LiFePO4 vs. Lead acid@Different current of discharge



Cycle life in Different DOD @25°C



Charge voltage and SOC status @25°C

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