

# TAB E.Leisure premium

Lithium Iron Phosphate Battery



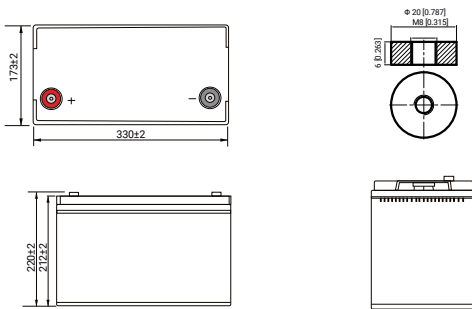
HD25.6-50  
25.6V | 50Ah | 1280Wh

## Features of LiFePO4 Battery

- Longer Cycle Life: Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.
- Lighter Weight: About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.
- Higher Power: Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.
- Wider Temperature Range:  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ .
- Superior Safety: Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.



## Physical Dimension



## Application



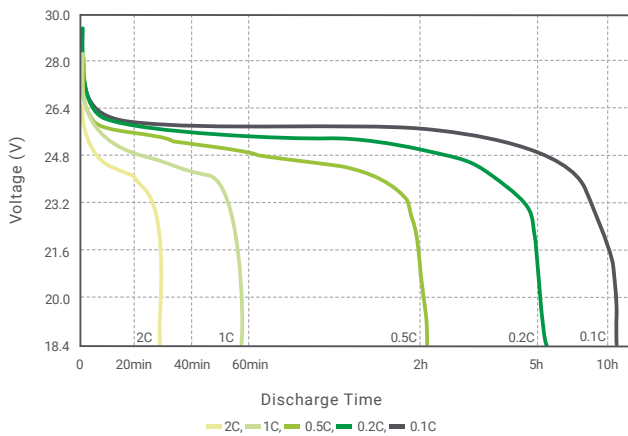
- Electric vehicles, electric mobility
- Solar/wind energy storage system
- UPS, backup power
- Telecommunication
- Medical equipment
- Lighting

## Specification

Electrical Characteristics	Nominal Voltage	25.6V
	Nominal Capacity	50Ah
	Energy	1280 Wh
	Internal Resistance	$\leq 60\text{m}\Omega$
	Cycle Life	$> 4000$ cycles
	Months Self Discharge	$< 3\%$
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	$28.4\text{V} \pm 29.2\text{V}$
	Charge Mode	0.2C to 29.2V, then 29.2V charge current to 0.02C(CC/CV)
	Charger Current	25A
	Max. Charge Current	50A
	Charge Cut-off Voltage	$31.2\text{V} \pm 0.2\text{V}$
Standard Discharge	Continuous Current	50A
	Max. Pulse Current	100A(<5s)
	Discharge Cut-off Voltage	20V
Environmental	Charge Temperature	$0^{\circ}\text{C}$ to $45^{\circ}\text{C}$ (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	$-20^{\circ}\text{C}$ to $60^{\circ}\text{C}$ (-4F to 140F) @60±25% Relative Humidity
	Storage Temperature	$0^{\circ}\text{C}$ to $40^{\circ}\text{C}$ (32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP56
Mechanical	Cell & Method	26650 8S16P
	Plastic Case	ABS
	Dimensions (mm)	330*173*212 mm
	Weight (kg)	12,5 kg
	Terminal	M8
Features	Bluetooth / RS485 / RS232 / SMBus / CANBus SOC LED / LCD Indicator	

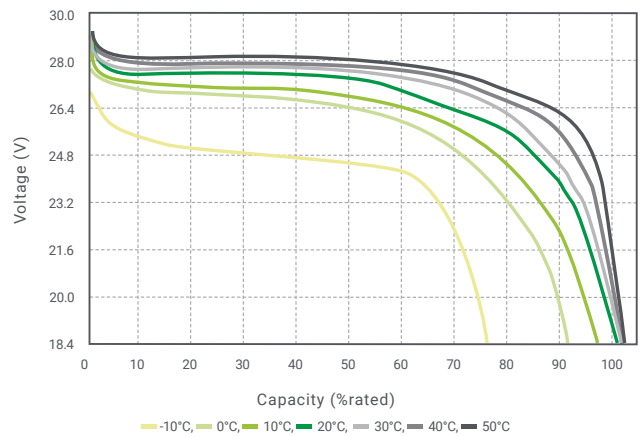
### Different Rate Discharge Curve

Different Rate Discharge Curve @ 25°C



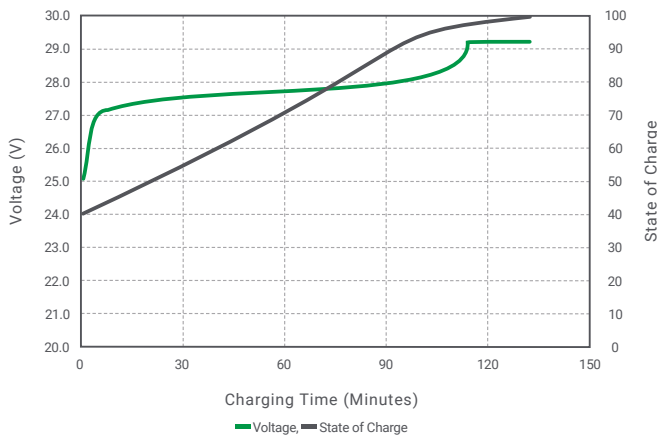
### Different Temperature Discharge Curve

Different Temperature Discharge Curve @ 0.5



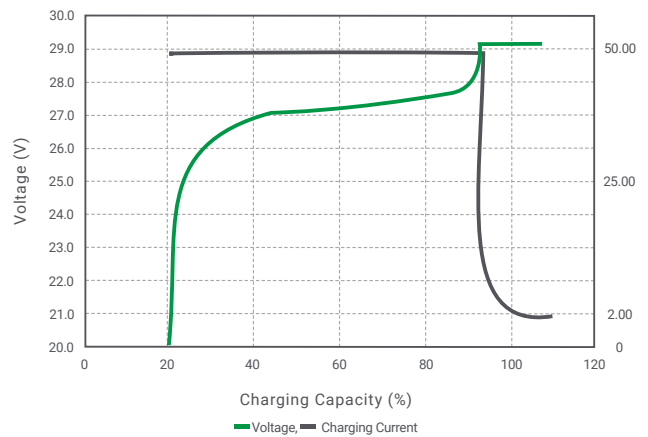
### Characteristics Curve

State of Charge Curve @0.5C 25°C



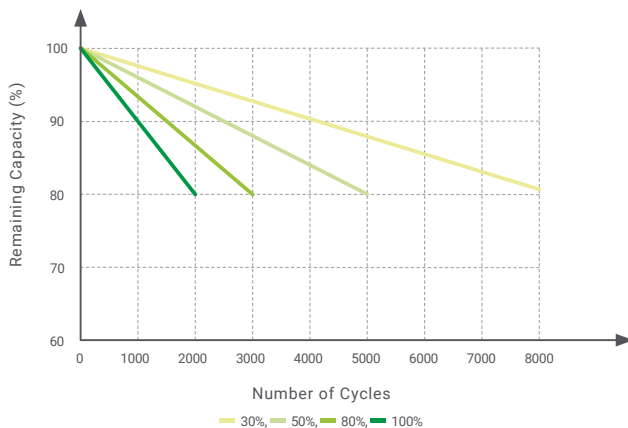
### Characteristics Curve

Charging Characteristics @0.5C 25°C



### Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



### Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve

