# **TAB E.Leisure premium**

**Lithium Iron Phosphate Battery** 



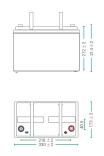
HD12.8-100 **12.8V I 100Ah I 1280Wh** 

### **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°C~ 60°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

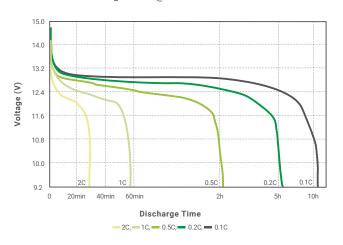
# **Specification**

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	100Ah (C5,25°C)
	Energy	1280 Whm
	Internal Resistance	≤60mΩ
	Cycle Life	>4000 cycles
	Months Self Discharge	<3%
	Efficiency of Charge	100% @0.5C
	Efficiency of Discharge	96~99% @1C
Standard Charge	Charge Voltage	14.6V±0.2V
	Charge Mode	0.2C to 14.6V, then 14.6V charge current to 0.02C(CC/CV)
	Charger Current	50A
	Max. Charge Current	100A
	Charge Cut-off Voltage	15.6V±0.2V
Standard Discharge	Continuous Current	100A
	Max. Pulse Current	120A(<3s)
	Discharge Cut -off Voltage	10V
Environmental	Charge Temperature	0°C to 45°C (32F to 113F) @60±25% Relative Humidity
	Discharge Temperature	-20°C to 60°C (-22F to 140F) @60±25% Relative Humidity
	Storage Temperature	-0°C to 40°C (-32F to 104F) @60±25% Relative Humidity
	Water Dust Resistance	IP56
Mechanical	Cell & Method	18650 4S66P
	Plastic Case	ABS
	Dimensions (mm)	330*173*212mm
	Weight (kg)	11,6 kg
	Terminal	M8
Features	Bluetooth / RS485 / RS232 / SMBus / CANBus	
	SOC LED / LCD Indicator	



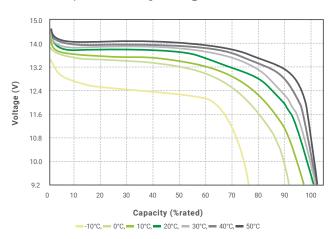
# **Different Rate Discharge Curve**

Different Rate Discharge Curve @ 25°C



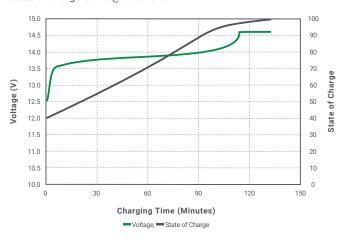
#### **Different Temperature Discharge Curve**

Different Temperature Discharge Curve @ 0.5



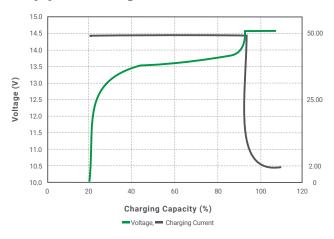
#### **Characteristics Curve**

State of Charge Curve @0.5C 25°C



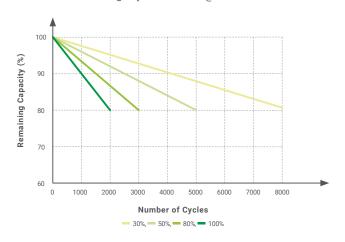
## **Characteristics Curve**

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

