### **Lithium Battery** ES480-100RPT



### **Energy Storage Lithium battery ES480-100RTP**

### **Benefits**

- 3-5 times longer service life than the traditional VRLA, helps to increase the systems operational reliability and saves frequent replacement cost;
- ♦ 60% lighter and 40% smaller than the exactly same capacity VRLA batteries, saves footprint, lessen the weight load and cooling consumption;
- ◆ 100% of usable energy provided by the LiFePO4 technology, allows you to discharge the battery entirely without any downtime of your operation;
- ♦ 100% charge can be done within 2.5-3 hours which is impossible for VRLA;
- Every battery comes with user friendly integrated BMS to monitor and communicate re- garding the SOC, SOH, and to protect the sys- tem from shortcircuit, high and low discharging and charging, temperature etc.;
- ◆ Solve problems such as high electricity preces and unstable electricity.;

**ES480-100RTP** LiFePO4 batterv deliver proven quality and excellent perform-ance, no matter whatever your PCS brand is.

Power-All LFP battery systems provide a reliable and flexible solution that ensures 24/7 ESS uptime while delivering significant total-cost-of-ownership (TCO) savings. Capable of providing mega-watts of power in a small footprint, this battery solution is comprised of lightweight battery strings designed to seamlessly connect to a standard storage system. Lithium iron phosphate chemistry demonstrates superior characteristics in ESS applications, this results in high energy density, long life, flexible installation, improved cycle life and a lower TCO.

#### **Application:**

Power peak shaving and valley filling;

# **Advantages**



#### Saves money:

- 3-5 years warranty;
- 15+ years of design life;
- Up to 8X cycles than VRLA;



#### **Save Space:**

- 40% smaller;
- 60% lighter;



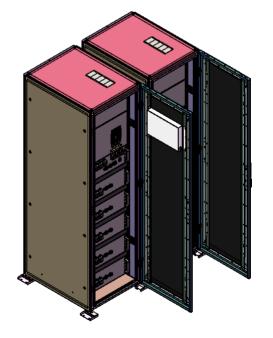
#### **Reduce Risk:**

24hrs x 7days BMS monitoring;



### **Manufacturing Excellence:**

- ◆ 10+ years of Manufacturing experience:
- 3 OCV tests;
- 72hrs high temperature test;
- 14 days room temperature tests during production; ensures most reliable cells in the market;





# Lithium Battery ES480-100RPT



### **Power-All Lithium Cell**

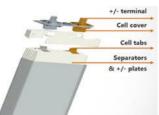
Power-All Energy Storage series cell are made by LFP (LiFePO4) available in both pouch and prismatic forms with light weight, stable performance and high energy density.

► Grade A cells:

High energy density design

► Laser welding process:

Reduce internal resistance



### **Principal function**

#### **►** System protection:

- Over or under temperature & voltage
- Short circuit or communication failure
- Over current of charge or discharge

#### ► Data acquisition:

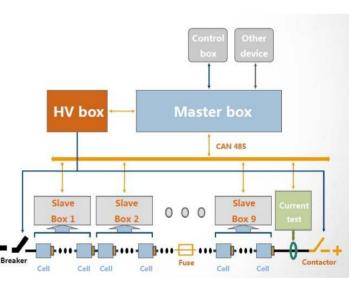
- Cell voltage and temperature
- Cumulative charge/ discharge power
- Current & capacity of battery module
- ► Cell balancing
- **► SOC & communication**

### **Power-All Lithium Module**

Whole integrated storage system with both lithium modules and BMS, quite convenient in both maintenance and installation, extendable to large scale, 19inch standardized module.

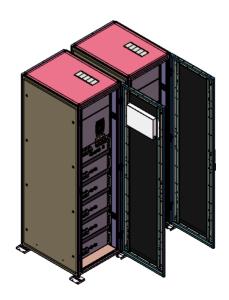
- ► Customized system with flexibility
- ► Wide range of voltage and capacity
- ► Modular design for easy installation
- ► Integrated with battery management





## **Power-All Storage System**







# Lithium Battery ES480-100RPT



## **Technical Specification:**

### **Basic Specification**

Baoic opcomoation	
Nominal Voltage	480V
Typical Capacity	100Ah
Energy	48KWh
Charging	
Maximum charging voltage allowed	576V
Normal Charge current	50A
Maximum charging current allowed	100A@battery initial temperature 25±5°C
<b>Dis-Charging</b>	
Output voltage range	400~576V
Normal discharge current	100A
Maximum dis-charging current allowed	600A
Cutoff voltage	400V
Others	
Temperature	Charging: 0~45°C, Dis-charging: -20°C~60°C
Size (L*W*H)	1300*800*2100mm
Weight	720±20KG