



# DATA SHEET

KH-ES4850

## KEHENG 48V 50Ah LiFePO4 LITHIUM BATTERY

Crafted out of Lithium Iron Phosphate (LiFePO4) technology, this is a battery built to last. With 3,000+ recharge cycles (and up to 7,000 @50%DOD) the 50Ah provides 5 X the lifespan than your typical SLA battery. Built in smart BMS which can realize real-time monitoring the battery, Compatible with inverters of multiple brands, which can support 16 units parallel connection.



### SPECIFICATIONS

Nominal Voltage	51.2V
Rated Capacity	50AH @0.5C to 40V
Stored energy	2400Wh
Cycle life@100%DOD	>3000 Cycles@100%DOD >4000 Cycles@80%DOD >7000 Cycles@50%DOD
Approx. Weight	31.5 kg
Internal Resistance	≤80.0 m Ω
Max. Charge Current	25 A
Max. Discharge Current	50 A
Charge Cut-off Voltage	58.4V
Discharge Cut-Off Voltage	40V
Dimensions	L483mm×W400mm×H175mm
Series & Parallel Connection	Maximum 16 units in parallel Connection
Operating Temperature Range	
Charge	32°F (0°C) to 113°F (45°C)
Discharge	-4°F (-20°C) to 140°F (60°C)
Storage	-4°F (-20°C) to 140°F (60°C)
Self-Discharge Rate	≤3%/month @ 25° C
Life Expectancy (years)	15 years @ 25° C
Communication Port	RS485, RS2332, CAN



### COMPLIED STANDARD

- ✓ IEC 62133
- ✓ UL 1642
- ✓ ISO9001
- ✓ ISO14001
- ✓ UN38.3
- ✓ RoHS

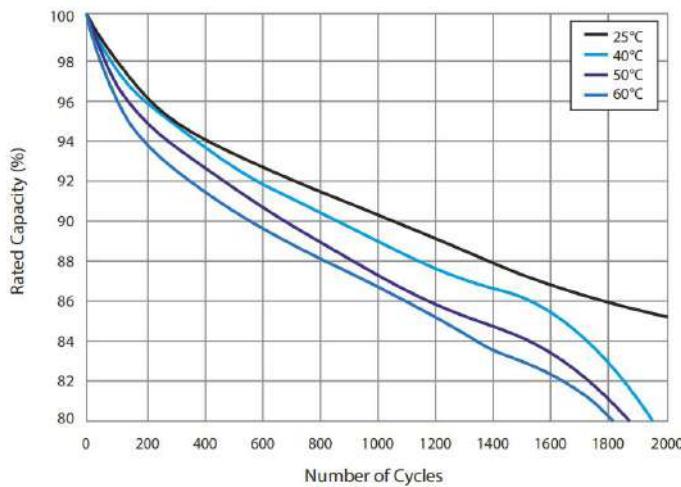
### INTELLIGENT BMS FUNCTION

- Over charge protection function
- Over discharge protection function
- Over current protection function
- Short-circuit protection function
- Temperature protection function
- Cell Balance function
- Communicate function
- Alarm function

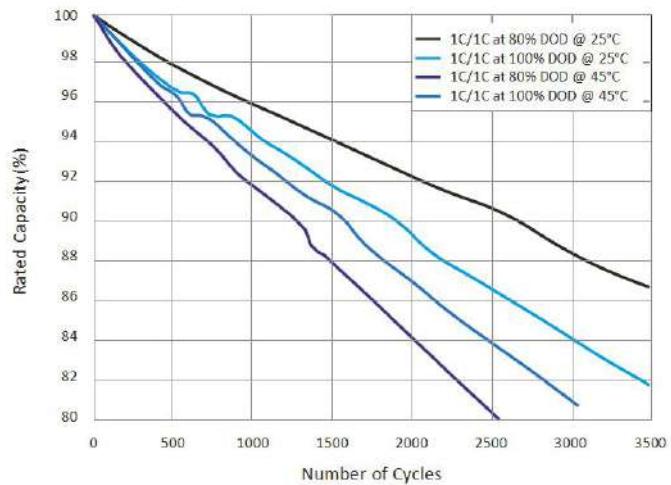
### APPLICATIONS

RESS      BESS      Back-up system      Data center      Telecon      Energy storage system

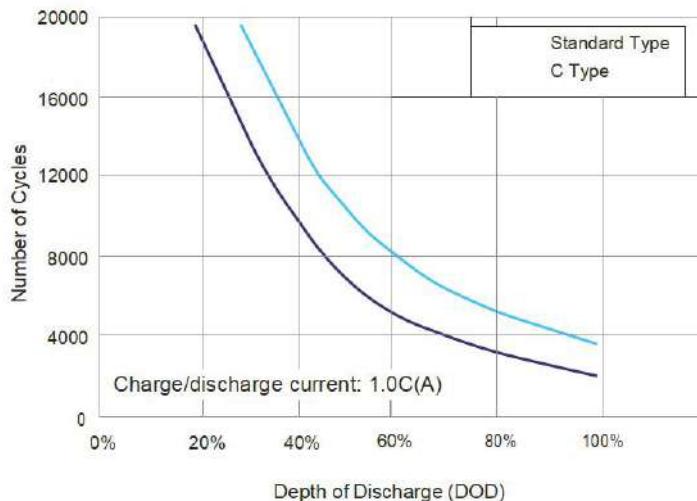
## CHARACTERISTIC CURVE



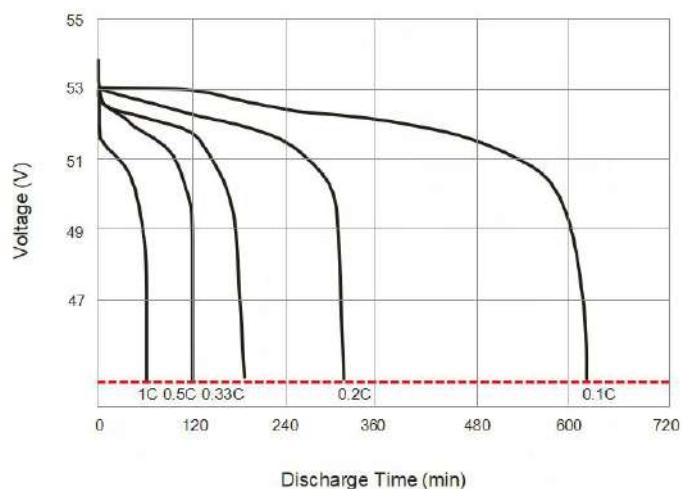
100% DOD Cycle Curves at Different Temperatures



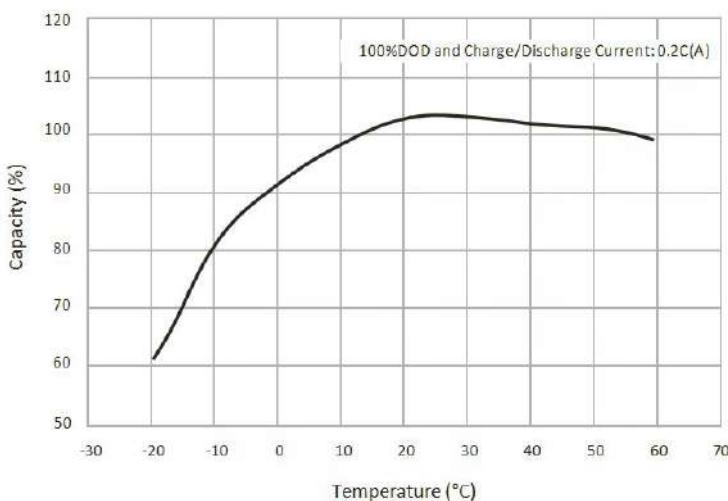
1C Cycle Curves at Different DOD&Temperatures



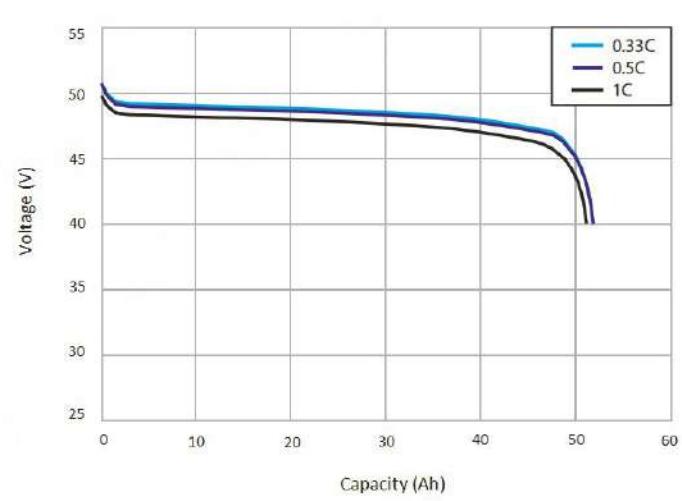
DOD in Relation to Cycle Life (25°C)



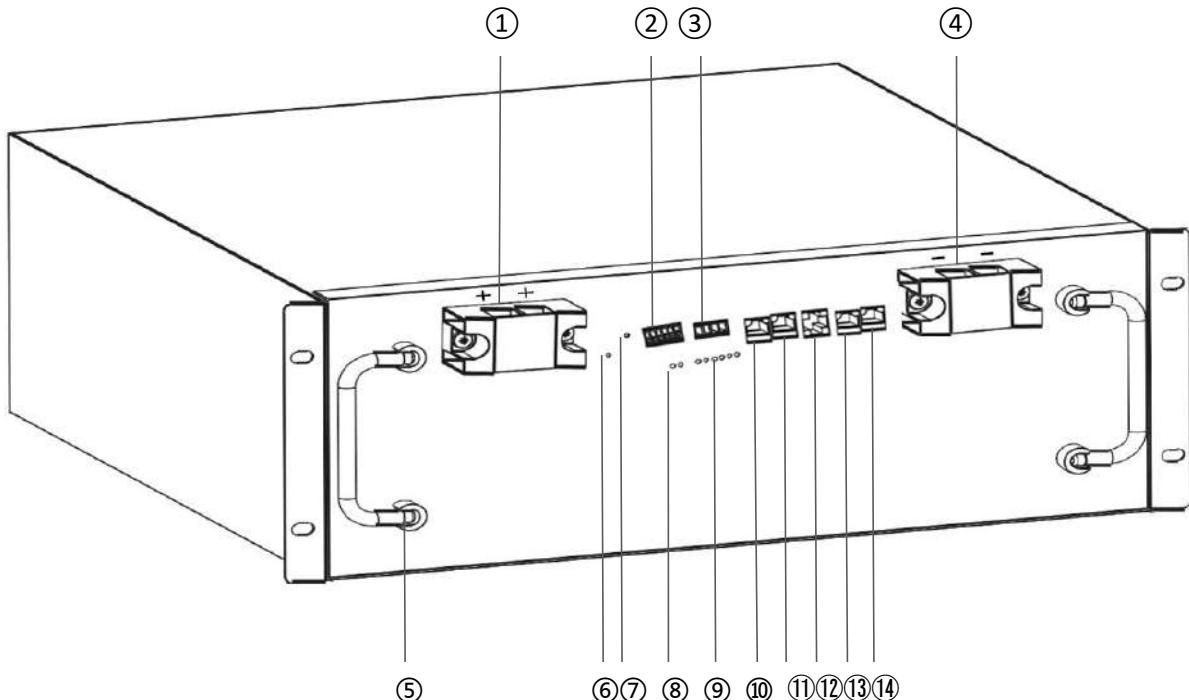
Discharge Time in Relation to Discharge Rate (25°C)



Temperature Effect in Relation to Battery Capacity

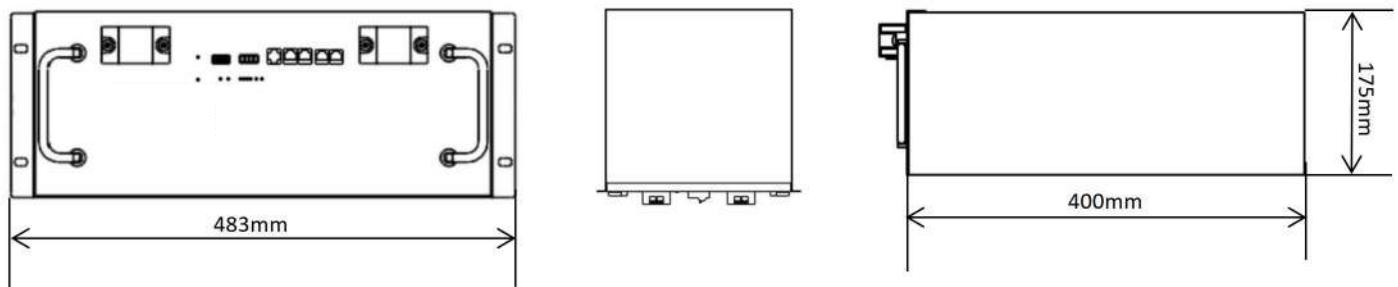


Discharge Capacity in Relation to Discharge Rate



<u>①Positive Terminal</u>	<u>②ADD Dialer</u>	<u>③DRY CONTACT</u>	<u>④Negative Terminal</u>
<u>⑤SS Handle</u>	<u>⑥ON/OFF Button</u>	<u>⑦Reset Key</u>	<u>⑧Run Indicator Light</u>
<u>⑨Electricity Volume Indicator</u>	<u>⑩RS485 Port</u>	<u>⑪CAN Port</u>	<u>⑫RS232 Port</u>
<u>⑬RS485 Port</u>	<u>⑭RS485 Port</u>		

#### BATTERY DIMENSIONS



**Keheng New Energy Technology (shenzhen) Co.,Ltd**

Floor 8, D8 Bldg,Lang kou Industrial Park, Long hua District, Shenzhen,China

Tel:+86 0755-21044322      Fax: +86 0755-21044322

Website:[www.keheng-battery.com](http://www.keheng-battery.com)

Email:[info@keheng-battery.com](mailto:info@keheng-battery.com)

