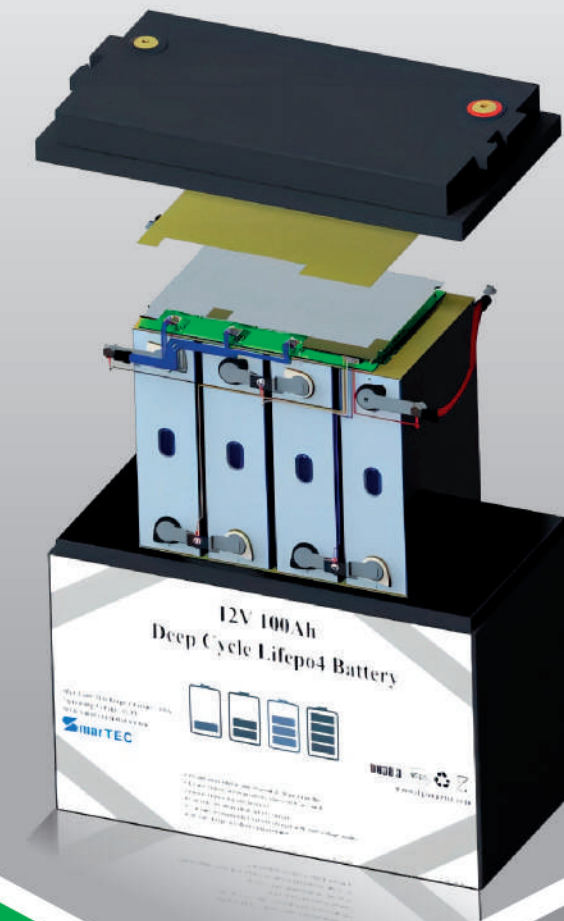


# Battery Pack Designer & BMS Manufacturer

SHENZHEN SMARTEC TECHNOLOGY CO.,LTD.  
DONGGUAN SMARTEC NEW ENERGY CO., LTD.

**SmarTEC**  
(since 2007)

Bring You A Safe,  
Green, Smart Life



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# LiFePo4 Batteries Series

(To Replace the LEAD ACID/AGM/GEL Battery )

# WHY CHOOSE



Lead Acid Battery

- Short cycle life (Only 300~350cycles)
- Slow charging
- High self-discharge (4-5% per month)
- Low power density
- Big size, heavy weight
- Pollution

V  
S



Lifepo4 Battery

- Long cycle life (1500~2000cycles)
- Fast charging (10X faster)
- Low self-discharge (<2% per month)
- High power density
- Small size, light weight (<1/3 the Weight and the size)
- Eco-friendly

# DIFFERENT SOLUTIONS FOR YOUR OPTION

Protections	1 Basic Solution (standard BMS)	2 Intelligent Solution (BMS with bluetooth APP)
Over charge	√	√
Over Discharge	√	√
Over current	√	√
Over Voltage	√	√
Under-Voltage	√	√
Over Temperature	√	√
Cell Balancing	√	√
Short Circuit	√	√
With communication		√
With Bluetooth APP		√



Solution 1 : with basic protections for lithium batteries

solution 2: can read the battery states on PC through a communication tool or on your cell phone through bluetooth app.

**12V**

**(4S Lifepo4 Batteries To Replace The Lead Acid /AGM Batteries)**

12V LiFePO4 (4S)					
voltage & capacity	Working current	Integrated BMS	Battery Dimension (mm)	total Weight	Apperance
12V 7AH-8AH	8A	PCM-L04S30-E22	L151*W65*H97	1.2-1.5kg	in a plastic case
12V 10AH	10A	PCM-L04S30-E22	L151*W99*H94	1.6kg	in a plastic case
12V 20AH	20A	PCM-L04S30-E22	L181*W77*H170	2.5kg	in a plastic case
12V 30AH	20A-30A	PCM-L04S20-F98	L223*W95*H175 L195*W133*H171	3.1kg	in a plastic case
12V 40AH	30A-40A	PCM-L05S60-F91 (4S)	L223*W120*H175	3.3kg	in a plastic case
12V 50AH	50A	PCM-L05S60-F91 (4S)	L223*W150*H178	8kg	in a plastic case
12V 60AH	50A-60A	PCM-L04S70-E71	L257*W132*H200	12kg	in a plastic case
12V 70AH	50A-70A	PCM-L04S100-G20	L260*W168*H209	13.5kg	in a plastic case
12V 100AH	100A	PCM-L04S100-G20	L330*W172*H220	15kg	in a plastic case
12V 120AH	100A	PCM-L04S100-G20	L406*W173*H236	16kg	in a plastic case
12V 150AH	100A-150A	PCM-L04S150-G21	L490*W170*H240	17kg	in a plastic case
12V 200AH	100A-200A	PCM-L16S200-F77 (4S)	L522*W269*H220	30kg	in a plastic case
12V 250AH	150A-200A	PCM-L16S100-F77 (4S)	L522*W269*H220	38kg	in a plastic case
Remark: Above information is just for your reference. The exact data will to be determined by your specific needs. The higher capacity batteries could be also customized based on your needs.					

**24V**

**(8S Lifepo4 Batteries To Replace The Lead Acid /AGM Batteries)**

24V LiFePO4 (8S)					
voltage & capacity	Working current	Integrated BMS	Battery Dimension (mm)	total Weight	Apperance
24V 50AH	50A	PCM-L08S60-G19	L330*W172*H220	15kg	in a plastic case
24V 100AH	100A	PCM-L12S100-F74 (8S)	L525*W245*H218	16kg	in a plastic case
24V 150AH	150A	PCM-L16S200-F77 (8S)	L522*W269*H220	17kg	in a plastic case
24V 200AH	200A	PCM-L16S200-F77 (8S)	customized type	undetermined	Iron case-customized
24V 250AH	200A	PCM-L16S200-F77 (8S)	customized type	undetermined	Iron case-customized
Remark: Above information is just for your reference. The exact data will to be determined by your specific needs. The higher capacity batteries could be also customized based on your needs.					

**48V**

**(16S Lifepo4 Batteries To Replace The Lead Acid /AGM Batteries)**

48V LiFePO4 (16S)					
voltage & capacity	Working current	Integrated BMS	Battery Dimension (mm)	total Weight	Apperance
48V 50AH	45A-60A	PCM-L17S70-F95 (16S)	L522*W269*H220	undetermined	Iron case-customized
48V 100AH	100A	PCM-16S100-F83	customized type	undetermined	Iron case-customized
48V 150AH	150A	PCM-L16S200-F77	customized type	undetermined	Iron case-customized
48V 200AH	100A-150A	PCM-L16S200-F77	customized type	undetermined	Iron case-customized
Remark: Above information is just for your reference. The exact data will to be determined by your specific needs. The higher capacity batteries could be also customized based on your needs.					

### 4S-16S Standard BMS For Lead Acid Replacement LiFePO4 Batteries (Basic Solution)

Model	Pictures	Dimension(L*W*T)	Max. Working current	Feature/Applications
PCM-L04S35-J68		78*52	30A	12V7AH / 12V 10AH / 12V 30AH supports 4-5PCS connected in series.
PCM-L04S50-J91		120*65	60A	12V50Ah supports 4-5PCS connected in series.
PCM-L4S100-K28		150*90*11 (Terminal locking 14.5mm)	100A	12V100Ah / 12V 200AH supports 4-5PCS connected in series.
PCM-L08S150-K34		200*90*11 (Terminal locking 14.5mm)	150A	24V150Ah/ 24V 200AH supports 4-5PCS connected in series.
PCM-L08S100-K54 A-2		150*90*15	100A	24V100Ah / 200Ah supports 2PCS connected in series.
PCM-L16S150-J44 (A-2)		230*100*20	150A	48V150Ah / 48V 200Ah
PCM-L20S160-K02(16S)		200*90*25	160A	60V150Ah / 60V 200AH

### 4S-16S Smart BMS For Lead Acid Replacement LiFePO4 Batteries (Advanced Solution)

Model	Pictures	Dimension (L*W*T)	Working current	Feature/Applications
PCM-L04S100-J88 A-1		200*98*11 (Terminal locking 14.5mm)	100A	12V100Ah / 12V 200AH BQ4050/BQ40Z50, supports 4PCS connected in series.
PCM-L04S200-K72		200*115	200A	12V200Ah/ 12V 250AH /12V 300AH/400AH BQ4050/BQ40Z50, With Low temp. heating function. supports 4PCS connected in series.
PCM-L04S200-K81		200*100	200A	12V200Ah/ 12V 250AH /12V 300AH/400AH BQ769003+MCU,URAT/RS485 communication protocol, Pre-charge/discharge function, Data storage
PCM-L04S200-K83		200*115*18	200A	12V200Ah/ 12V 250AH /12V 300AH/400AH with OV charge. 4PCS connected in series
PCM-L08S60-K38		136*80*11	60A	24V50Ah/ 24V 60AH SH367309+BQ34Z100 supports 2pcs connected in series
PCM-L15S200-K79		250*100*18 (Not Inc. terminal)	200A	48V100Ah/48V 200AH BQ7693003/BQ7694003+MCU, URAT/RS485/CAN communication protocol,With Pre-charge/discharge function,Bluetooth APP,External control switch output
PCM-L16S100-L10		220*100*15	100A	48V 100Ah/48V 200AH With pre-charge/discharge with weak current switch.

# MULTI SCENARIO APPLICATION

The high quality LiFePO4 batteries will be provided with self-owned brand of BMS as "one-stop" solution which is widely used in the applications of Solar Energy Storage Systems, Electrical Vehicles, Camper Van, Motorcycle Starter, etc.



SMARTEC

PRODUCT SPECIFICATION 

12V7AH

	Item	Specification
12V 7AH	Battery type	Li fepo4 Batteries
	Nominal Voltage(V)	12.8V
	Nominal Capacity(Ah )	7Ah
	Charging Cur rent (A )	7A Max.
	Continue s discharge current(A)	7A Max.
	Total Weight(Kg)	1kg
	Battery dimension (L*W*H)(mm )	151*65*97mm
	Operating temperature range	Charging 0~+60°C Discharging -20°C ~+60°C
	Feature	three different solutions for your opt ion
	Applications	Electric Sprayer /Emergency Lighting/ Medical Devices /Stage lights / Garden tools,etc.



**ESPECIALLY FOR RV / YACHT**

**PRODUCT SPECIFICATION**

**12V100AH**

**12V200AH**

**Feature:**  
Intelligent Batteries with Bluetooth, To Bring You A New & Easy Battery Status Monitoring before Sailing, To Ensure Your Safety

**100A** Maximum Continuous Charge/ Discharge Current

**-20°C ~ 60°C** Wide Operation Temperature

**1500~2000 Cycles** Long Cycle Life



	Item	Specification
12V 200AH	Battery type	Lifepo4 Batteries
	Nominal Voltage(V)	12.8V
	Nominal Capacity(Ah)	200AH
	Charging Current(A)	200A Max.
	Continues discharge current(A)	200A Max.
	Total Weight(Kg)	30kg±0.2kg
	Battery dimension (L*W*H)(mm)	522*269*220mm
	Operating temperature range	Charging 0-60° CDischarging -20°C ~+60°C
	Feature	three different solutions for your option
Applications	Camper van /Electric boat / Solar energy storage system / Backup power supply,etc.	



# 12V-48V LiFePO4 Batteries (To Replace Lead Acid Batteries)

SHENZHEN SMARTEC TECHNOLOGY LTD.

## Customize What You Want

- Working current: 10A - 300A
- Charge & discharge share a common port
- Charge & discharge work at different ports.
- With/without Bluetooth APP
- With/without LED indicator
- choose a basic protections or intelligent monitoring
- With/without communications  
(SMBUS/12C BUS/RS485/RS232/UART)



**“ Make Your Own Brand,  
Achieve A Better Market ”**



# Why choose us

01

built-in BMS with self-developed design( sorts of solutions for your optional)

02

different brands of cells for your optional (to meet your target market)

03

basic solution or advanced solution for your optional

04

PCM/BMS designer & manufacture (bring you Customized Design)

05

Rich experiences for BMS & Lithium batteries ( ensure you a high performance of battery pack solution)

06

25+ Inspection Procures For battery pack (ensure you a high quality)

# How we work

## 1. Production For BMS



SMT Processing

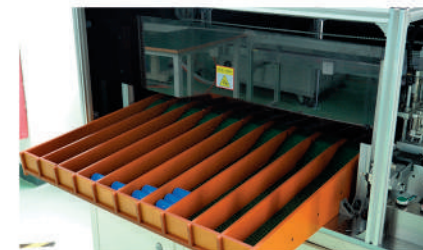


AOI Inspection



BMS quality control -Testing

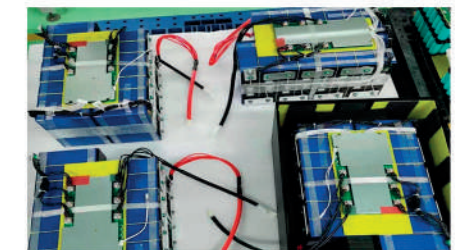
## 2. Production For Battery Pack



Single cell Sorting



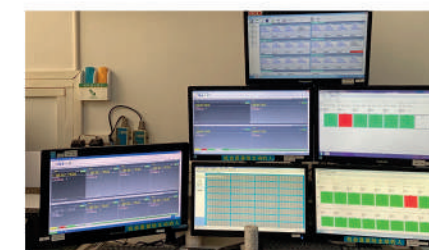
Battery Spot Welding



Battery BMS assembly



Aging Testing



Battery Test Mornitoring



High / Low Temp. Testing



Workshop For BMS



Workshop For Battery Pack



Packing & Shipment