

Best Solution of Battery



Medical Battery



Lighting Battery



Portable Power Station



Home Energy Storage System



E-mobility



Lead Acid Replacement Battery

SUPER SP PACK[®]

Best Solution of Battery

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SUPER PACK[®]
Best Solution of Battery

Lithium Ion Batteries & Power Solution

ABOUT US

Guangdong Superpack Technology Co., Ltd. is founded in 2018. It is a joint-venture of Xupai, the leading Chinese lead acid batteries manufacturer founded in 1995.

Superpack has some of the brightest minds working on developing and producing our rechargeable lithium ion batteries. Superpack is a rechargeable lithium battery maker like no other. From R&D, design to manufacturing and sales, battery management system (BMS), related battery packs and customized solutions, we set the pace.

OUR SOLUTIONS

Energy Storage

For Residential, Commercial & Industrial, and Utility

Motive Power

For E-bike, E-scooter, Golf Cart, E-forklift, AGV, etc

Lead-acid Replacement

For Marine, RV, Backup Power, Solar and others where lead-acid is used.

What's More

Power Tool, Garden Tool, Solar Street Light, Medical, Military and others

OUR ADVANTAGES

Strong R&D Ability

Superpack R&D team has over 10 years of experience and many of them are experts in their fields. 10% of revenue has been invested in R&D every year, to ensure our products and service to meet the latest technology over our competitors and keep going on innovation.

Advanced Equipment

Superpack factory is equipped with advanced machines, and the key machines are from world first-class brands, which enable us to maintain the highest quality along with the competitive price.

Strict Quality Assurance

Successful business runs on quality. To ensure the constancy quality of all Superpack's products, Superpack implemented and certified ISO 9001-2015, Superpack has built and deployed strict quality control and assurance standards in addition to well-structured inspection procedures at each critical step of our production process.

Customized Solutions Ability

Over years, Superpack has developed a wide range of solutions for different applications, which enable us to quickly respond to customer's demand and provide them with the best solutions with short lead time & competitive prices.

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12V LiFePO4 Battery

Standard Type Battery

ST Series

RANGE SUMMARY

LiFePO4 batteries are an ideal replacement for a traditional lead acid battery, offering a drop-in solution for lead acid battery replacement. Superpack batteries can be used individually or connected in series or parallel to create a larger system.

The series LiFePO4 battery is fit for E-mobility, Energy Storage System, Defense & Security, telecom outdoor applications, renewable energy systems, and other harsh environment applications.

FEATURES AND BENEFITS

- Over 5 years design life
- Wide operating temperature range from -25°C to 60°C
- Maintenance-free, no watering, plug and play
- Reliable even if partial state of charge
- Fast charge within 3 hours
- Lightweight, 50-60% less weight than lead acid equivalent
- Long life, up to 10X longer cycle life than lead acid equivalent
- Constant power available throughout discharge, as well as constant voltage, mean voltage would not decline like lead acid
- Low self-discharge, allows for worry-free storage

CHARGING PROFILE

- Constant current (CC), then constant voltage (CV) charging is recommended
- Recommended float charge voltage: 13.8V @ 25°C
- Max. charge current allowable : 0.5C₅A *

* For the battery whose capacity is equal to or higher than 150Ah, 75A continuous charge current is recommended.



General Specifications

Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Max discharge current (A)	Dimension (mm)	Dimension (in)	Approx. Weight (Kg)	Weight (lbs)	BCI/DIN size	Terminal	Batteries in series
SPF12V7.2-ST	12.8	7.2	15	151*65*99	5.9*2.6*3.9	0.9	2.0		F2	Max 4S
SPF12V10-ST	12.8	10	15	151*99*101	5.9*3.9*4.0	1.3	2.9		F2	Max 4S
SPF12V20-ST	12.8	20	20	181*76*166	7.1*3.0*6.5	2.6	5.6		NB1	Max 4S
SPF12V35-ST	12.8	35	35	195*131*171	7.7*5.2*6.7	4.4	9.7	U1	T11(M8)	Max 4S
SPF12V50-ST	12.8	50	50	197*166*171	7.8*6.5*6.7	6.3	13.9		T11(M8)	Max 4S
SPF12V75-ST	12.8	75	80	260*168*218	10.2*6.6*8.6	9.6	21.2	24	T11(M8)	Max 4S
SPF12V100-ST	12.8	100	100	307*168*221	12.1*6.6*8.7	12.6	27.8	27	T11(M8)	Max 4S
SPF12V100-ST	12.8	100	100	329*172*223	13.0*6.8*8.8	12.6	27.8	31	T11(M8)	Max 4S
SPF12V100-DST	12.8	100	100	318*175*190	12.5*6.9*7.5	12.6	27.8	94R/H7L4	DIN	Max 4S
SPF12V100-DST	12.8	100	100	355*175*190	14.0*6.9*7.5	12.8	28.2	49/H8L5	DIN	Max 4S
SPF12V200-ST	12.8	200	150	520*268*228	20.5*10.6*9.0	25.8	56.9	8D	T11(M8)	Max 4S
SPF12V260-ST	12.8	260	150	520*268*228	20.5*10.6*9.0	32.0	70.5	8D	T11(M8)	Max 4S
SPF12V300-ST	12.8	300	150	520*268*228	20.5*10.6*9.0	35.7	78.7	8D	T11(M8)	Max 4S

APPLICATIONS

- AGV
- Marine
- Golf Car
- Power Utility
- Floor Scrubber
- Medical Cart
- Recreational Vehicle
- Outdoor Applications
- Telecom
- Renewable Energy system

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)

We offer OEM, ODM & "whole life" after-sale service



PING AN



CB

UN38.3

CE



12V LiFePO4 Battery

Low Temperature Charging Battery

LT Series

RANGE SUMMARY

Superpack LT series LiFePO4 batteries are specifically designed for cold temperature charging. It can be charged at temperatures down to -20°C (-4°F). It features proprietary technology which draws power from the charger itself, requiring no additional components.

The LT Series LiFePO4 battery has the same size and performance as ST Series LiFePO4 battery but can be safely charged when temperatures drop as low as -20°C using a standard charger. It is an ideal choice for use in RVs, off-grid solar, and in any application where charging in cold temperatures is necessary.

FEATURES AND BENEFITS

- Specifically designed for charging at cold temperature
- Wide operating temperature range from -25°C to 60°C
- Maintenance-free, no watering, plug and play
- Reliable even if partial state of charge
- Lightweight, 50-60% less weight than lead acid equivalent
- Long life, up to 10X longer cycle life than lead acid equivalent
- Constant power available throughout discharge, as well as constant voltage, mean voltage would not decline like lead acid
- Low self-discharge, allows for worry-free storage

CHARGING PROFILE

- Constant current (CC), then constant voltage (CV) charging is recommended
- Recommended float charge voltage: 13.8V @ 25°C
- Max. charge current allowable : 0.5C₅A *

* For the battery whose capacity is equal to or higher 100Ah, 50A continuous charge current is recommended.



General Specifications

Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Max discharge current (A)	Dimension (mm)	Dimension (in)	Approx. Weight (Kg)	Weight (lbs)	BCI/DIN size	Terminal	Batteries in series
SPF12V100-LT	12.8	100	150	329*172*223	13.0*6.8*8.8	12.6	27.8	31	T11(M8)	Consult Superpack for insight
SPF12V100-DLT	12.8	100	150	318*175*190	12.5*6.9*7.5	12.6	27.8	94R/H7L4	DIN	
SPF12V100-DLT	12.8	100	150	355*175*190	14.0*6.9*7.5	12.8	28.2	49/H8L5	DIN	
SPF12V200-LT	12.8	200	150	520*268*228	20.5*10.6*9	25.8	56.9	8D	T11(M8)	
SPF12V300-LT	12.8	300	150	520*268*228	20.5*10.6*9	35.7	78.7	8D	T11(M8)	



APPLICATIONS

- AGV
- Marine
- Golf Car
- Power Utility
- Floor Scrubber
- Medical Cart
- Recreational Vehicle
- Outdoor Applications
- Telecom
- Renewable Energy system

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)



We offer OEM, ODM & "whole life" after-sale service



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UN38.3



12V LiFePO4 Battery

Bluetooth Type Battery

BL Series

RANGE SUMMARY

Superpack BL series LiFePO4 battery has a built-in bluetooth module that lets you communicate with the battery using our free APP for smart mobile.

You can check the battery capacity or State of Charge (SoC), voltage, temperature, charge or discharge current simply by using the APP on your compatible smart mobile.

The BL series is an ideal choice for use in RVs, off-grid solar, marine, renewable energy system, etc.

FEATURES AND BENEFITS

- ▶ Bluetooth communication capability for battery status through Superpack free APP
- ▶ Built-in BMS against abuse
- ▶ Fast charge within 3 hours
- ▶ Lightweight, 50-60% less weight than lead acid equivalent
- ▶ Up to 10X longer cycle life than lead acid equivalent
- ▶ Faster charging and lower self-discharge
- ▶ Delivers twice the power of lead acid batteries at the high discharge rate

CHARGING PROFILE

- ▶ Constant current (CC), then constant voltage (CV) charging is recommended
- ▶ Recommended float charge voltage: 13.8V @ 25°C
- ▶ Max. charge current allowable : 0.5C₅ *

* For the battery whose capacity is equal to or higher 150Ah, 75A continuous charge current is recommended.



General Specifications

Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Max discharge current (A)	Dimension (mm)	Dimension (in)	Approx. Weight (Kg)	Weight (lbs)	BCI/DIN size	Terminal	Batteries in series
SPF12V100-BL	12.8	100	100	329*172*223	13.0*6.8*8.8	12.6	27.8	31	T11(M8)	Max 4S
SPF12V100-DBL	12.8	100	100	318*175*190	12.5*6.9*7.5	12.6	27.8	94R/H7L4	DIN	Max 4S
SPF12V100-DBL	12.8	100	100	355*175*190	14.0*6.9*7.5	12.8	28.2	49/H8L5	DIN	Max 4S
SPF12V200-BL	12.8	200	150	520*268*228	20.5*10.6*9	25.8	53.4	8D	T11(M8)	Max 4S
SPF12V300-BL	12.8	300	150	520*268*228	20.5*10.6*9	35.7	78.7	8D	T11(M8)	Max 4S



Available on the
App Store

Bluetooth®

ANDROID APP ON
Google Play

Mobile APP

- ▶ The Mobile phone should support Bluetooth 4.0 BLE (Bluetooth super low energy)
- ▶ Measuring distance, up to 15m
- ▶ Selective gauge IC of total voltage or each string voltage
- ▶ Real-time remotely monitor battery status

APPLICATIONS

- ▶ AGV
- ▶ Marine
- ▶ Golf Car
- ▶ Power Utility
- ▶ Floor Scrubber
- ▶ Medical Cart
- ▶ Recreational Vehicle
- ▶ Outdoor Applications
- ▶ Telecom
- ▶ Renewable Energy system

COMPLIED STANDARDS

- ▶ IEC62133, IEC62619 (Cell)
- ▶ UL1642 (Cell)
- ▶ CE (Battery)
- ▶ UN38.3 (Battery)



We offer OEM, ODM & "whole life" after-sale service



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CB

UN38.3

CE



12V LiFePO4 Battery

Low Temperature & Bluetooth Battery

LB Series

RANGE SUMMARY

Superpack LB series LiFePO4 battery has a built-in bluetooth module that lets you communicate with the battery using our free APP for smart mobile.

You can check the battery capacity or State of Charge (SoC), voltage, temperature, charge or discharge current simply by using the APP on your compatible smart mobile.

At the same time, the LB series battery can be safely charged when temperatures drop as low as -20°C(-4°F) using a standard charger.

The LB series is suited for RVs, off-grid solar, and in any application where charging in cold temperatures is necessary.

FEATURES AND BENEFITS

- Specifically designed for cold temperature charging
- Safely charge at temperatures down to -20°C (-4°F)
- Bluetooth communication capability for battery status through Superpack free APP
- Built-in BMS against abuse
- Lightweight, 50-60% less weight than lead acid equivalent
- Up to 10X longer cycle life than lead acid equivalent
- Faster charging and lower self-discharge
- Delivers twice the power of lead acid batteries at the high discharge rate

CHARGING PROFILE

- Constant current(CC), then constant voltage (CV) charging is recommended
- Recommended float charge voltage: 13.8V @ 25°C
- Max. charge current allowable : 0.5C₅A *

* For the battery whose capacity is equal to or higher 100Ah, 50A continuous charge current is recommended.



General Specifications

Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Max discharge current (A)	Dimension (mm)	Dimension (in)	Approx. Weight (Kg)	Weight (lbs)	BCI/DIN size	Terminal	Batteries in series
SPF12V100-LB	12.8	100	150	329*172*223	13.0*6.8*8.8	12.6	27.8	31	T11(M8)	Consult Superpack for insight
SPF12V100-DLB	12.8	100	150	318*175*190	12.5*6.9*7.5	12.6	27.8	94R/H7L4	DIN	
SPF12V100-DLB	12.8	100	150	355*175*190	14.0*6.9*7.5	12.8	28.2	49/H8L5	DIN	
SPF12V200-LB	12.8	200	150	520*268*228	20.5*10.6*9	25.8	56.9	8D	T11(M8)	
SPF12V300-LB	12.8	300	150	520*268*228	20.5*10.6*9	35.7	78.7	8D	T11(M8)	



Available on the
App Store

Bluetooth®

ANDROID APP ON
Google Play

-20°C (-4°F)

Mobile APP

- The Mobile phone should support Bluetooth 4.0 BLE (Bluetooth super low energy)
- Measuring distance, up to 15m
- Selective gauge IC of total voltage or each string voltage
- Real-time remotely monitor battery status
- Authorized person can change settings via Android APP

APPLICATIONS

- AGV
- Marine
- Golf Car
- Power Utility
- Floor Scrubber
- Medical Cart
- Recreational Vehicle
- Outdoor Applications
- Telecom
- Renewable Energy system

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)



We offer OEM, ODM & "whole life" after-sale service



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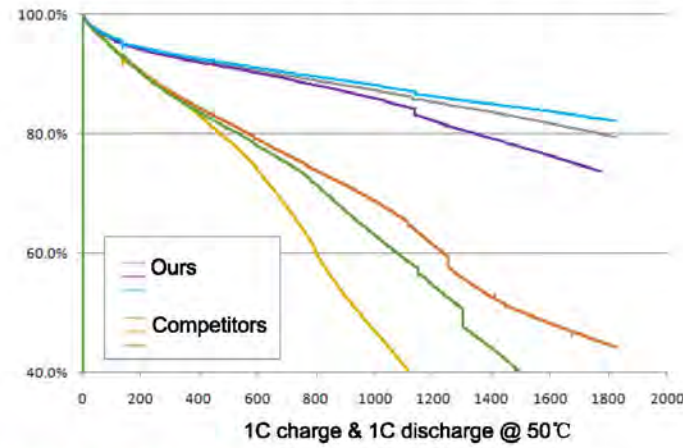
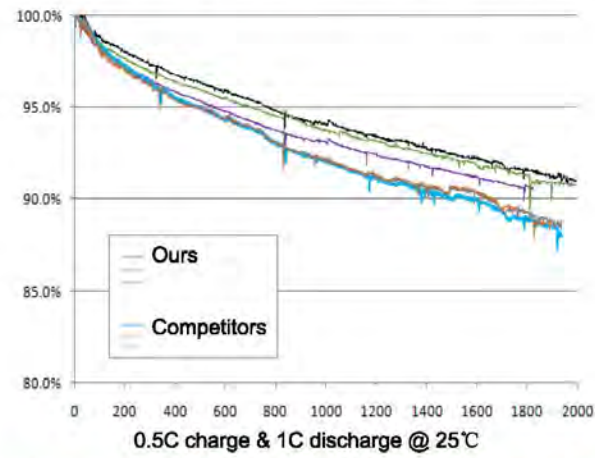
CB

UN38.3

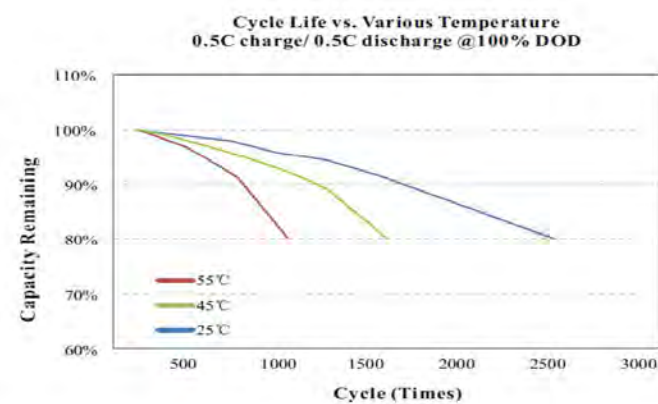
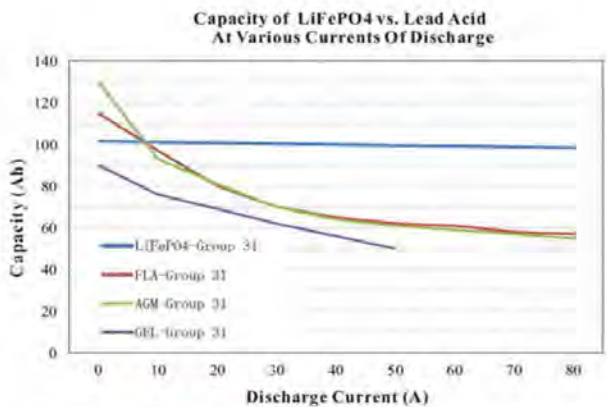
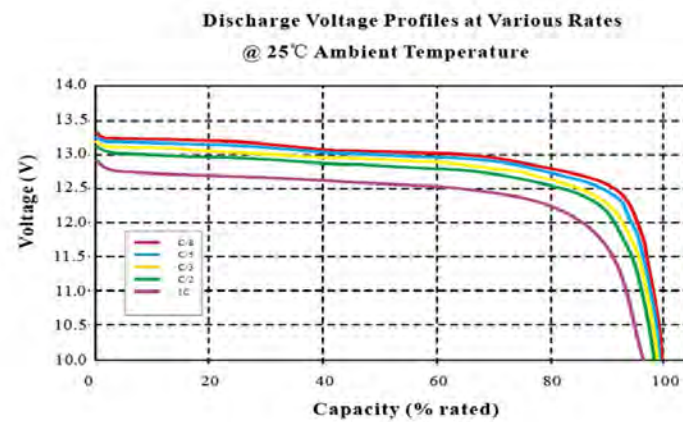
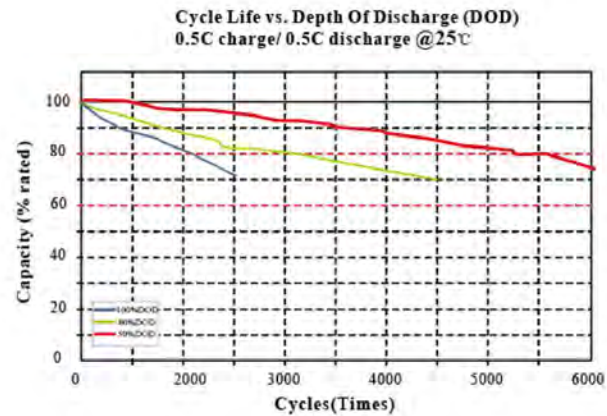
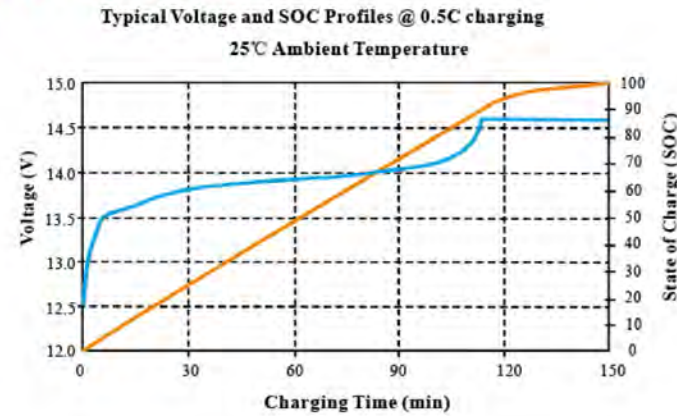
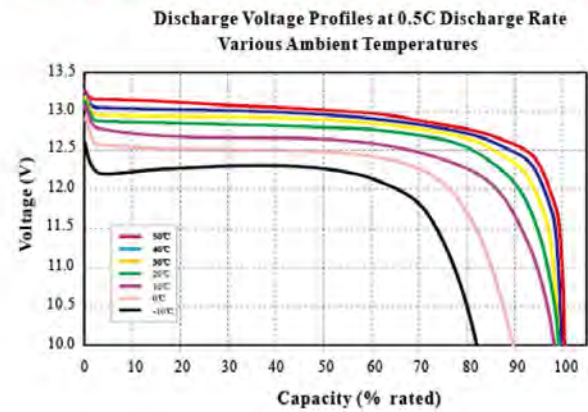


6000 Cycles LiFePO4 cell

We use cylindrical 26650 cells which shows perfect performance for our 12.8V LiFePO4 batteries in lead acid footprint.

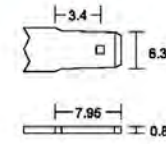


SPF12V100-ST PERFORMANCE CHARACTERISTICS

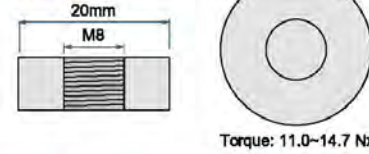


TERMINAL DETAILS

F2 FASTON
0.250" x 0.032"
quick disconnect
tabs.

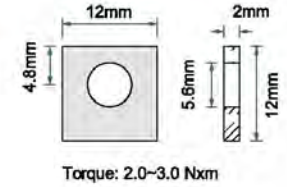


T11 THREADED INSERT
- 8mm STUD

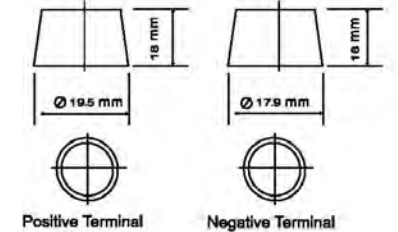


NB1 TERMINAL

With nut & bolt connectors



DIN TERMINAL

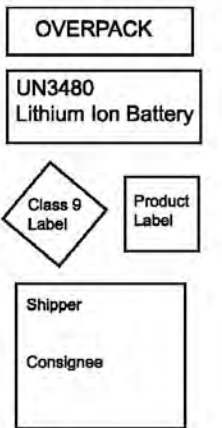
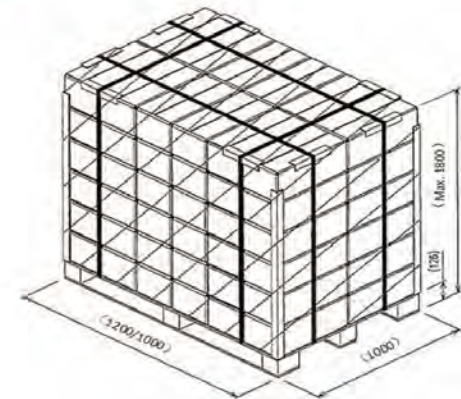
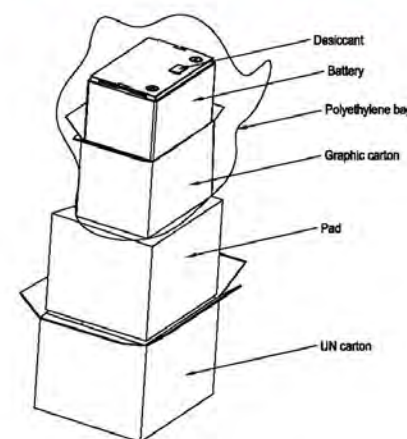


Standard packaging method

Model	Dimension (mm)	BCI/DIN size	Carton Packing information			A 20' Container Packing information			
			Quantity (Pcs/Ctn)	Net Weight (Kg/Ctn)	Gross Weight (Kg/Ctn)	Dimension (mm)	Pallet Size (m)	Quantity (Pcs/Pallet)	Quantity (Pcs/Container)
SPF12V7.2	151*65*97		12	10.8	12.1	370*270*320		540	5400
SPF12V10	151*99*101		8	10.4	11.5			360	3600
SPF12V20	181*76*166		10	26.0	27.4		490*390*210	420	4200
SPF12V35	195*131*171	U1	4	17.6	18.8			168	1680
SPF12V50	197*166*171		1	6.3	6.9	248*188*252		144	1440
SPF12V75	260*168*218	24	1	9.6	10.3	340*280*235	1.2*1.0	63	630
SPF12V100	307*168*221	27	1	12.2	12.9				
SPF12V100	329*172*223	31	1	12.6	13.4	370*270*320		45	450
SPF12V100	355*175*190	DIN	1	12.8	13.6				
SPF12V150			1	21.0	22.1				
SPF12V200	520*268*228	8D	1	25.8	26.9	570*320*260		24	240
SPF12V260			1	32.0	33.1				
SPF12V300			1	35.7	36.8				

* All the batteries use UN cartons

Packing specification for shipment



Superpack can use cylindrical 32700 or prismatic cells to make 12.8V LiFePO4 batteries for cost-down purpose with some performance compromise. The batteries used 32700 or prismatic cells would have an "E" in the suffix.

For example,
SPF12V100-EST means the 12.8V100Ah LiFePO4 standard battery used economical cells
SPF12V300-EBL means the 12.8V300Ah LiFePO4 bluetooth battery used economical cells

FREQUENTLY ASKED QUESTIONS

What are the benefits of changing a lead acid battery with Superpack LiFePO4 battery?

- ▶ Similar voltage to 12V lead acid battery
- Intrinsic safe lithium ion battery
- 1/2~1/3 lightweight
- Fast charge & stable output
- Slow capacity loss
- High cycle life
- Cost effective
- Environment friendly

Can Superpack LiFePO4 batteries be connected in series or in parallel?

- ▶ Although ST and BL series batteries can be in series or parallel, **we recommend using a customized battery to avoid several batteries in series or parallel.** Fill in the questionnaire on page 14 to develop a customized battery, please! For cost, space, temporarily use or other reasons, we can accept several batteries to be in series or parallel as per the following instructions although there is still risk and performance compromise.
 - Do not reverse the polarity of the LT series and LB series batteries. The charger with anti-reverse polarity is recommended.
 - The batteries should have the same SOC, voltage & impedance when connecting them in series or parallel.
 - Ensure all batteries were fully charged individually by matched chargers before connecting them in series or parallel.
 - The purpose of connecting in parallel is to increase the capacity, not to increase the discharging current to avoid some batteries cut-off discharging earlier than others. Higher capacity batteries are recommended to avoid several batteries in parallel.
 - Check "batteries in series" from Superpack's short-form specification, user guide or brochure to check how many batteries can be connected in series, please. We recommend 4 batteries in parallel at most.
 - Consult Superpack for tips if you want to use LT and LB series batteries in series or parallel.
 - Do not connect Superpack 12V LiFePO4 battery to other chemistry, lots, manufacturers, series, impedance, voltage or capacity battery.
 - Once in series or parallel configuration ensure maintenance such as voltage, impedance inspection or a full charge is completed every 6 months at least.
 - Once in series or parallel configuration, the system must be charged and discharged as a system. If one battery needs to be replaced, the whole system should be replaced.
 - **If you have special requirements on series or parallel installation, Superpack can offer you another solution.**

Can Superpack LiFePO4 battery be installed in any orientation or location?

- ▶ Yes, they can be installed in any orientation or location as your current Lead acid battery. However, please note that the Superpack LiFePO4 battery is NOT fit for under hood (Auto) applications.

Can Superpack LiFePO4 battery be charged with a lead acid battery charger?

- ▶ A standard CC-CV lead acid battery charger can be used to charge Superpack LiFePO4 battery. However, the following requirements must be met:
 - The Charger must not contain desulphation/equalization setting. If so, turned off it, please
 - Maximum charge voltage of 14.6V
 - Recommended float charge voltage 13.8V
 - Please ensure your charger is matched to the battery
 - A charger with LiFePO4 setting is recommended
 - Some "smart" or multi-stage lead acid battery chargers would detect the OCV first, so it would refuse to charge the LiFePO4 battery which is at under voltage protection mode.
 - LT and LB series batteries have a built-in heating foil, a CC-CV charger is recommended. Contact Superpack to know the charge current if CC charger is a must

Can we find other solutions since the current superpack LiFePO4 battery isn't fit for our applications?

- ▶ Fill in the questionnaire on page 14, please! We can offer OEM, ODM & "whole life" after-sale service

Questionnaire for battery pack & charger

Superpack is continuously R&D new products and our batteries are designed to meet and exceed customer requirement. For designing assistance, please simply complete and submit this form, or call us directly.

Company Name:		Contact Person:		
Address:		Email:		
Tel/Fax:		Website:		
Application (If necessary, our engineers will contact you directly)		Light E-Vehicle ☐	Energy Storage System ☐	
		Medical ☐	Portable device ☐ Other _____	
Battery	Voltage	Maximum Voltage(V):	or let us know the Motor voltage range	
		Minimum Voltage(V):		
		Nominal Voltage(V):		
	Capacity	Nominal discharge current(Amps):	Or let us know the Motor rated power and peak power	
		Peak discharge current(Amps):		
		Peak discharge current duration(Seconds):		
		Recharge time needed (Hours):		
		Capacity needed (Amp Hours):		
	Temperature range	Maximum temperature(°C):		
		Minimum temperature(°C):		
Working condition	Frequency: _____ times each ☐ day ☐ week ☐ month			
	Depth of discharge: ☐ 10% ☐ 50% ☐ 80% Other _____			
Max. Dimension	Length * Width * Height(mm):			
Max. Weight	_____ Kg			
Communication	No ☐ Yes ☐ If yes, detailed protocol _____			
Regeneration	No ☐ Yes ☐ (if yes, we need regeneration current & duration)			
Charger	Input Voltage(V): 110V ☐ 220V ☐ 100~240V ☐			
	Charge Current(A):			
	Input terminal: European ☐ US ☐ Other _____			
	Output terminal: _____			
Certification: CE ☐ UL ☐ Other _____				
Other information:				
Prototype evaluation period _____ weeks;		Prototype samples quantity _____ PCS;		
Pre-production period _____ weeks;		Pre-production quantity _____ PCS;		
Production quantity _____ PCS;				
Special requirement:				

The solar garden light decorates your pathway, patio or garden, all while taking advantage of solar energy.

Superpack offers a high price/performance ratio of LiFePO4 cells for solar garden light. The sun's rays would provide light for up to 8 hours on a full battery charge.



General Specifications

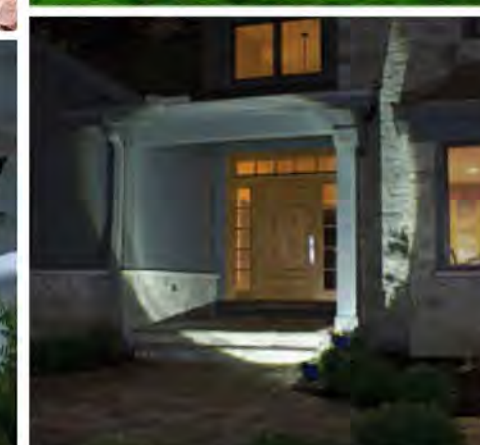
Model	Nominal voltage (V)	Nominal capacity (Ah)	Max discharge current (A)	Dimension (mm)	Dimension (in)	Approx. weight (g)	Approx. weight (lbs)	Cell
SPF3V0.4	3.2	0.4	0.4	Ø14*50	Ø0.6*2.0	21	0.05	IFR14500
SPF3V0.6	3.2	0.6	0.6	Ø14*50	Ø0.6*2.0	22	0.05	IFR14500
SPF3V1.0	3.2	1.0	1.0	Ø18*50	Ø0.7*2.0	31	0.06	IFR18500
SPF3V1.5	3.2	1.5	1.5	Ø18*65	Ø0.7*2.6	42	0.09	IFR18650
SPF3V3.3	3.2	3.3	3.3	Ø26*65	Ø1.0*2.6	82	0.18	IFR26650
SPF3V3.6	3.2	3.6	3.6	Ø26*65	Ø1.0*2.6	82	0.18	IFR26650

FEATURES & BENEFITS

- Higher cycle life
- Better storage
- Quicker recharge
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Cell)



We offer OEM, ODM & "whole life" after-sale service



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CE



The solar reading light is easy to use and environmentally friendly. It has a whole solar panel charger, just put a rechargeable battery in it and charge it in direct sunlight to provide 3 to 8 hours of power for the light.

Superpack offers a high price/performance ratio of LiFePO4 battery for solar reading light. Just a lightweight lithium battery, enough for your lighting to use for many years.



General Specifications

Model	Nominal voltage (V)	Nominal capacity (Ah)	Max. discharge current (A)	Dimension (mm)	Dimension (in)	Approx. weight (g)	Approx. weight (lbs)	Cell
SPF3V0.4	3.2	0.4	0.4	Ø15.5*52	Ø0.6*2.0	21	0.05	IFR14500
SPF3V0.6	3.2	0.6	0.6	Ø15.5*52	Ø0.6*2.0	22	0.05	IFR14500
SPF3V1.0	3.2	1.0	1.0	Ø19.5*52	Ø0.8*2.0	31	0.06	IFR18500
SPF3V1.5	3.2	1.5	1.5	Ø19.5*67	Ø0.8*2.6	42	0.09	IFR18650
SPF3V3.0	3.2	3.0	3.0	37*19*67	1.5*0.7*2.6	86	0.19	IFR18650
SPF3V3.3	3.2	3.3	3.3	Ø28.5*67	Ø1.1*2.6	82	0.18	IFR26650
SPF3V3.3	3.2	3.3	3.3	Ø28.5*67	Ø1.1*2.6	82	0.18	IFR26650
SPF3V6.0	3.2	6.0	6.0	75*19*67	3.0*0.7*2.6	170	0.37	IFR18650

FEATURES & BENEFITS

- Higher lifespan cycle life
- Better storage
- Quicker recharge
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (battery)
- UN38.3 (battery)



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LiFePO4 battery for Solar Tracker



LIGHTWEIGHT
50-60% less weight than lead acid equivalent.



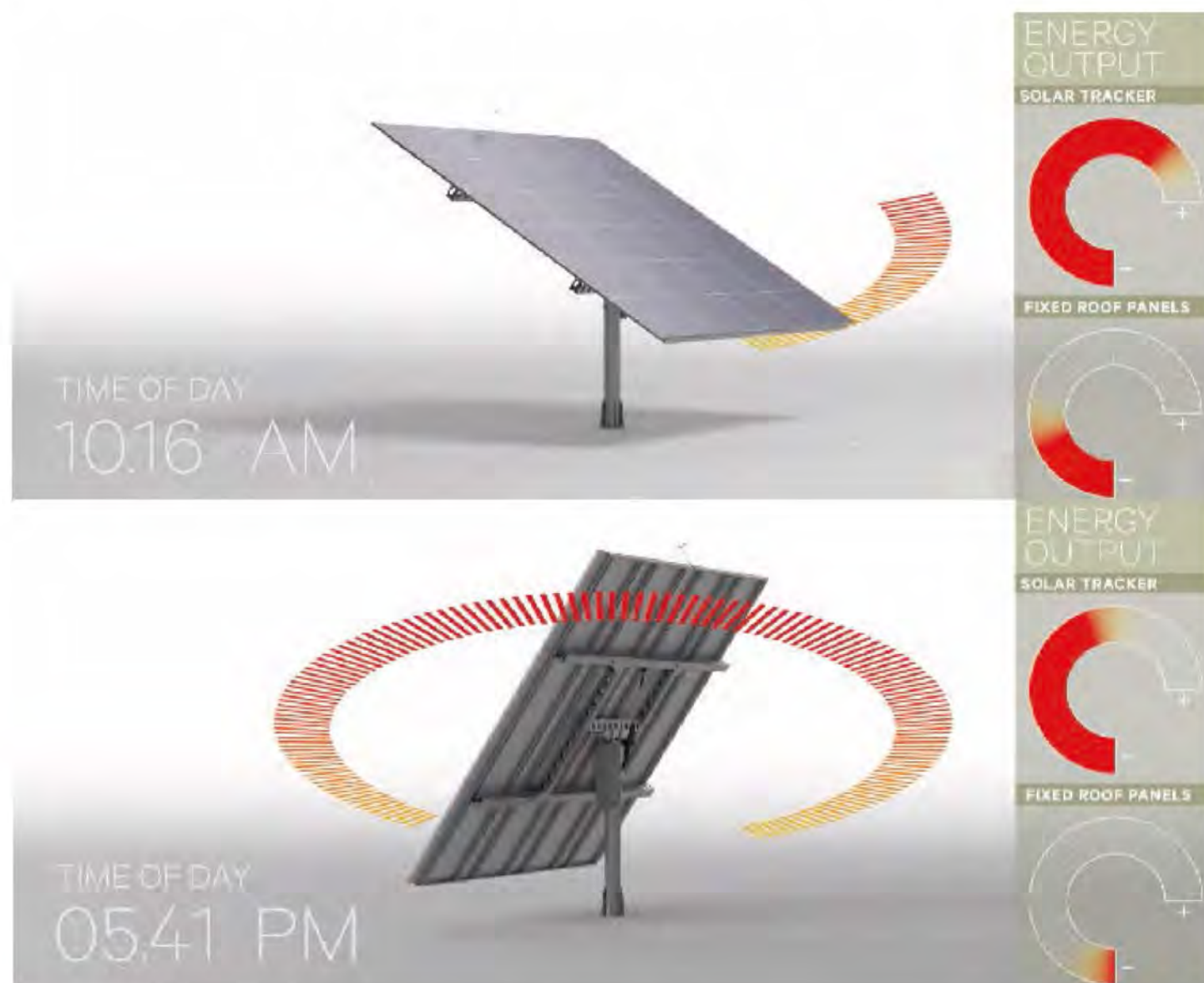
LONGER LIFE
Up to 10X longer cycle life than lead-acid equivalent.



RELIABLE PARTIAL STATE OF CHARGE
Allows for worry-free storage.



Our LiFePO4 battery enables solar trackers to capture all of the energy potentials of the day, giving you more return on your solar investment. They're a simple yet powerful solution for a brighter energy future.



General Specifications

Model	Nominal voltage (V)	Nominal capacity (Ah)	Dimension (mm)	Dimension (in)	Approx. weight (kg)	Approx. weight (lbs)	Cell
SPF24V3.4	25.6	3.4	108*55*80	4.3*2.2*3.2	0.8	1.8	IFR26650
SPF24V6.8	25.6	6.8	215*55*80	8.5*2.2*3.2	1.7	3.7	IFR26650

FEATURES & BENEFITS

- Higher lifespan
- Better storage
- Quicker recharge
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)



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Solar street light is such a great off-grid choice for public facilities. Solar street light is a stand-alone solar power system, all of its power supply is from batteries which must be able to undergo repeated and deep discharge.

Superpack LiFePO4 solar street batteries provide affordable, safe, accessible and reliable solar energy. Ordinary NMC batteries are not fit for solar street light because of safety, high-temperature performance, and lifespan.



General Specifications

Model	Nominal voltage (V)	Nominal capacity (Ah)	Energy (Wh)	Dimension (mm)	Customized	Approx. weight (Kg)	Cell	Built-in BMS
SPF12V6	12.8	6	76.8	110*150*30	-	0.4	IFR26650	Yes
SPF12V9	12.8	9	115.2	160*150*30	-	0.6	IFR26650	Yes
SPF12V12	12.8	12	153.6	210*150*30	-	0.8	IFR26650	Yes
SPF12V15	12.8	15	192.0	135*275*30	Yes	1.2	IFR26650	Yes
SPF12V18	12.8	18	230.4	160*275*30	Yes	1.5	IFR26650	Yes
SPF12V21	12.8	21	268.8	190*275*30	Yes	2.2	IFR26650	Yes
SPF12V27	12.8	27	345.6	210*275*30	Yes	2.5	IFR26650	Yes
SPF12V30	12.8	30	384.0	250*275*30	Yes	3.0	IFR26650	Yes
SPF12V33	12.8	33	422.4	270*275*30	Yes	3.3	IFR26650	Yes
SPF12V40	12.8	40	512.0	350*275*30	Yes	4.4	IFR26650	Yes
SPF12V50	12.8	50	640.0	460*275*30	Yes	5.0	IFR26650	Yes
SPF12V60	12.8	60	768.0	270*275*60	Yes	6.4	IFR26650	Yes
SPF12V70	12.8	70	896.0	295*275*60	Yes	7.0	IFR26650	Yes
SPF12V80	12.8	80	1024.0	350*275*60	Yes	8.7	IFR26650	Yes

FEATURES & BENEFITS

- Higher lifespan
- Better storage
- Quicker recharge
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)



Lighter Weight
About 40% of the weight of a comparable lead acid battery
A 'drop in' replacement for lead acid batteries.

High Rate Capability

Wide Working Temperature
-20°C ~ 60°C

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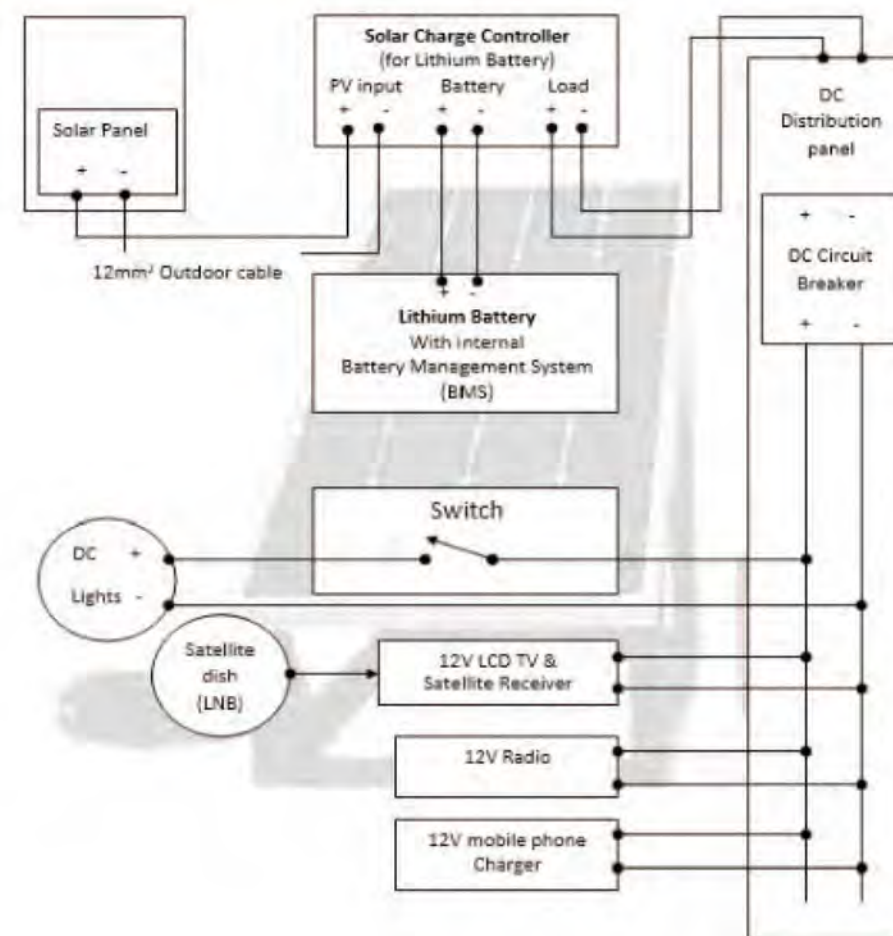
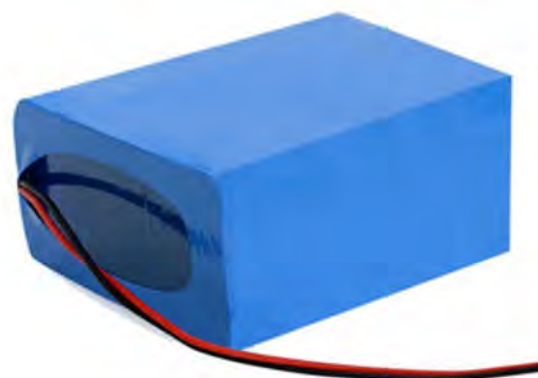


UN38.3



Solar home systems (SHS) are stand-alone photovoltaic systems that offer a cost-effective mode of supplying amenity power for lighting and appliances to remote off-grid households. In rural areas, that are not connected to the grid, SHS can be used to meet a household's energy demand fulfilling basic electric needs.

Superpack LiFePO4 battery is an ideal replacement for a traditional lead acid battery, highly suited for the solar home system. Just one battery to store energy can provide power for DC appliances such as lights, radios, e-cooker, and small TVs for about three to five hours a day.



FEATURES & BENEFITS

- High cycle life
- Better storage
- Quickly recharge
- Longer service life
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)

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CE



Superpack developed a series of the portable power station from 100W to 500W for the consumer market. And we are developing a portable power station of 2000W for the industrial market.

We can offer flexible combo/kits which includes 12V LiFePO4 battery, portable power station and foldable solar panels for recreational vehicles. A suitable combo/kits can offer you stable power supply for up to 7 days at an off-road camping site.

01 LIFEPO4 BATTERY



12V100Ah Battery



12V150Ah Battery



12V200Ah Battery



12V300Ah Battery

02 PORTABLE POWER STATION SERIES



SPN-100-111A



SPN-150-138A

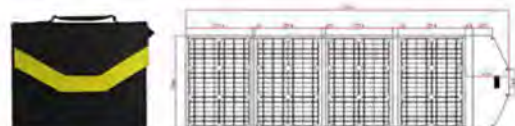


SPN-300-360A



SPN-1000-1075A

03 FOLDABLE SOLAR PANEL



USB: 5V/3A
QC3.0: 5V/3A
Type C: 5V/2A

Type C: 15V/2A

Type C: 15V/2A



Portable Devices



Portable Power Station



RV batteries

General Specifications

Model	Input	Output					Weight (Kg)	Dimension (mm)	Built-in Battery	Note
		AC	USB	LED	TYPE-C	DC				
SPN-100-111A	15V3A	100W	USB1:QC3.0 USB2:5V2.4A	N/A	5~12V 18W	12V8A	1.6	210*144*48.5	111Wh NMC	110V ~ 220V 50Hz ~ 60Hz Pure Sine wave
SPN-150-138A	15V3A	150W	USB1:QC3.0 USB2:5V2.4A	N/A	5~12V 18W	12V8A	1.2	220*80*80	138Wh NMC	
SPN-350-466A	12~24V 2~10A	350W	USB1:QC3.0 USB2,3:5V2.4A	3W	5~20V 18W	12V5A	5.5	φ160*268	466Wh NMC	
SPN-500-440A	17~19V 3~4A TYPE-C:60W	500W	USB1:QC3.0 USB2:5V/2.4A	2W	5~20V 60W	N/A	5.3	270*155*220	440Wh NMC	

* Housing Material: Aluminum + ABS

FEATURES & BENEFITS

- High cycle life
- Better storage
- Quickly recharge
- Longer service life
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133,IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)

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Smart LiFePO4 Battery For Solar off-grid system



COMPACT DESIGN
IP65 dust & and Robust housing



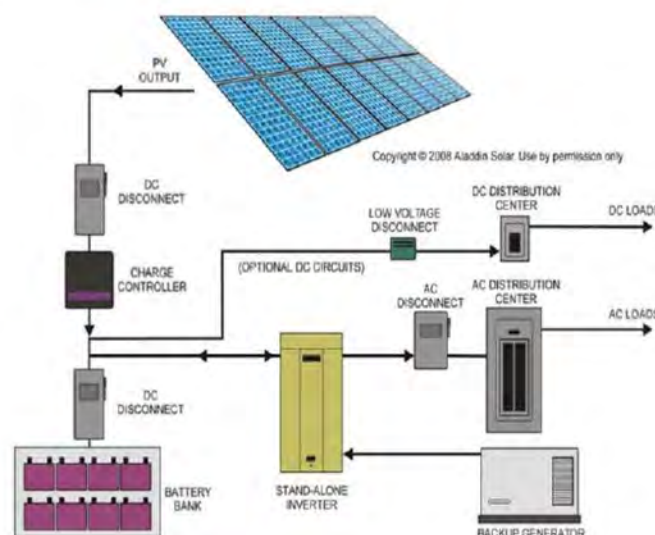
LONGER LIFE
Up to 10X longer cycle life than lead-acid equivalent.



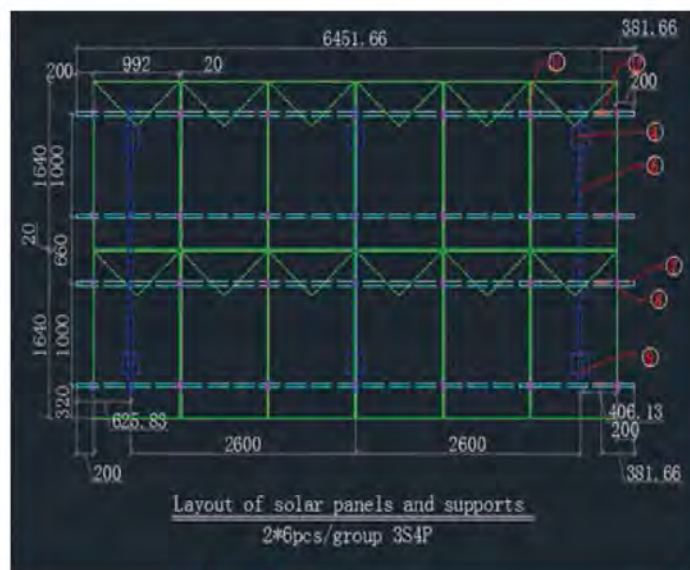
SMART
Built-in smart BMS with CAN/RS485 communication



Superpack engineer team can design a reasonable Off-grid solar power system solution, also conduct on-site survey and simulation calculation of photovoltaic off-grid system engineering, conduct project feasibility analysis, then install and debugging, etc.



Schematic



PV Design



Installation



Completion status



48V150Ah LiFePO4 Battery



48V200Ah LiFePO4 Battery



48V300Ah LiFePO4 Battery

General Specifications

Model	Nominal Voltage (V)	Nominal Capacity (Ah)	Max discharge current (A)	Dimension (mm)	Dimension (in)	Approx. weight (Kg)	Weight (lbs)
SPF48V150-ST	51.2	150	100	600*308*320	23.6*12.1*12.6	81	179
SPF48V200-ST	51.2	200	200	872*361*395	34.3*14.2*15.6	108	238
SPF48V300-ST	51.2	300	200	740*506*408	29.1*19.9*16.1	158	348

FEATURES & BENEFITS

- Higher lifespan
- Better storage
- Quicker recharge
- Extreme heat tolerance
- Lightweight
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)



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3KWh - 10KWh Home Energy Storage System Battery



Easy monitoring via PC or smart phone

Lithium-ion batteries

Intrinsic safe LiFePO4 battery was used;
10 years expectation service life is available;
Based on super long cycle life LiFePO4 cells.

Wireless management

Easy monitoring HESS remotely via PC or smart phone.

Modularity

Modular design makes scalable capacity is available.

Debugging interface



SP-ESS-5K



SP-ESS-10K

General Specifications

48V LiFePO4 Battery Specification		
Function	SP-ESS-5K	SP-ESS-10K
Nominal voltage	51.2V	51.2V
Operation voltage range	44.8-58.4V	44.8-58.4V
Nominal capacity	100Ah	200Ah
Watt-hours	5KWh	10KWh
Dimension (L * W * H)	650*500*165mm	1200*800*170mm
Approx. weight	60Kg	150Kg
Max. continuous charge current	50A	100A
Max. continuous discharge current	50A	100A
Scalability	15KWh	30KWh
Installation method	Max. 3 moudles in parallel	Max. 3 moudles in parallel
Cycle time (80% DOD, 25°C)	Wall Mounted	Floor Stand
Charge temperature range	6000	
Discharge temperature range	0-45°C	
Communication protocol	-10-60°C	
Protection	CAN / RS232 / RS485 / Wi-Fi (optional)	
Precharge control	Overcharge / overdischarge / overtemperature / overcurrent / short	
Lifetime	optional	
Storage time (-20°C ~35°C)	10 years	
Environment temperature range	3 months	
Storage temperature range	0-45°C	
IP Level	-10-40°C	
	IP21	

FEATURES & BENEFITS

- International standard 48V system
- CAN/RS232/RS485/Wi-Fi(optional)
- Floor stand or wall mounted
- Intrinsic safety LiFePO4 cells inside
- Active balancing technology
- Robust BMS
- Easy to install
- Customizable

COMPLIED STANDARDS

- IEC62133, IEC62619 (Cell)
- UL1642 (Cell)
- CE (Battery)
- UN38.3 (Battery)

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