

Striving to grow into a global lithium batteries leader acknowledged and respected at home and abroad, BSLBATT® has for many years been in working hard on designing, developing and manufacturing high-technology lithium batteries for lithium industry and specialized applications.



✉ Email  
inquiry@bsl-battery.com

☎ Mobile Phone  
+86-15539859075

📍 Office Address  
Room 608, Building 1 Zhonghui International Mansion, Huicheng District, Huizhou, Guangdong Province, China

☎ Company Phone  
+86-752-2819-469

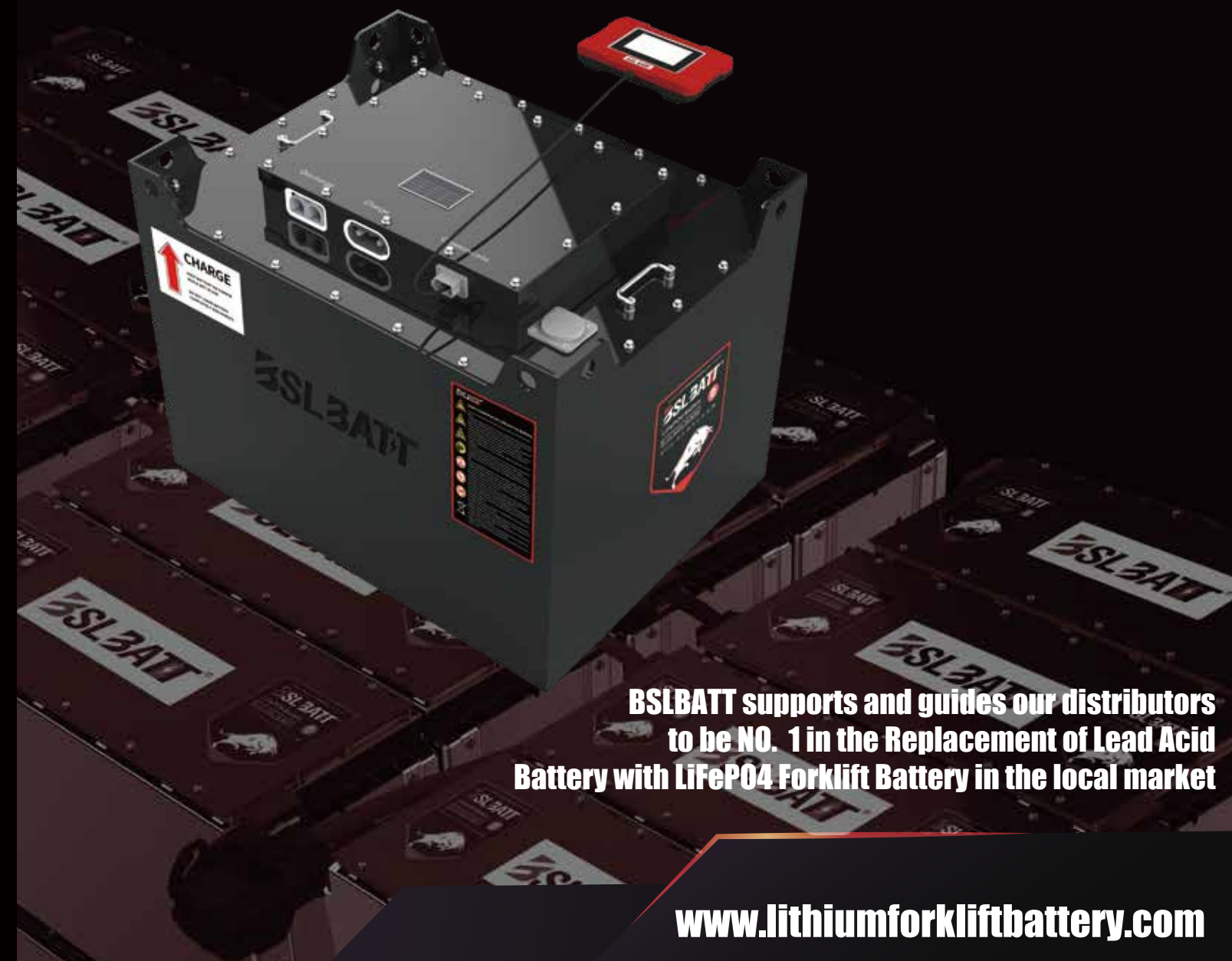
🌐 Site  
www.lithiumforkliftbattery.com

📍 Factory Address  
1/6/7F-1 Building1 Zhongkai Innovative Base - Huifeng 6th Road ZhongKai Hi-tech Zone, HuiZhou City, Guangdong, China.

**BSLBATT®**  
Best Solution Lithium Battery

## LiFeP04 Battery

Drop-in Lithium-ion For Lead-acid Alternatives



**BSLBATT supports and guides our distributors to be NO. 1 in the Replacement of Lead Acid Battery with LiFePO4 Forklift Battery in the local market**

[www.lithiumforkliftbattery.com](http://www.lithiumforkliftbattery.com)



**BSLBATT Battery** is an industrial lithium battery manufacturer based in China. Designed to meet the cost, performance, efficiency and durability requirements of the rugged warehouse environment. It includes application-specific cell chemistry and intelligent battery management electronics.

BSLBATT Battery has developed 43 lithium battery modules (100AH-1440AH) with different capacities. The coverage rate of forklift models exceeds 95%. With fully customizable features to fulfill the most demanding requirements.

The drop in replacement batteries make upgrading from Lead Acid to Lithium simple. Each is independently connected to the internet and cloud, reporting constant health updates. These modules can be activated or deactivated remotely if a fault is detected. Finally, the replacement of these modules is quick and easy: just slide one module out and put in a new one! The batteries are sized to fit the standard motive power lead acid battery, along with meeting the truck battery weight requirements. With superior performance and safety....

# Contents

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- 03 The benefits of lithium batteries
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## New technology. Create great value for your business

Converting from lead-acid to lithium-ion is easy, cost effective and increases the productivity of the truck and the operator.

**Retrofit your fleet to lithium-ion batteries.**

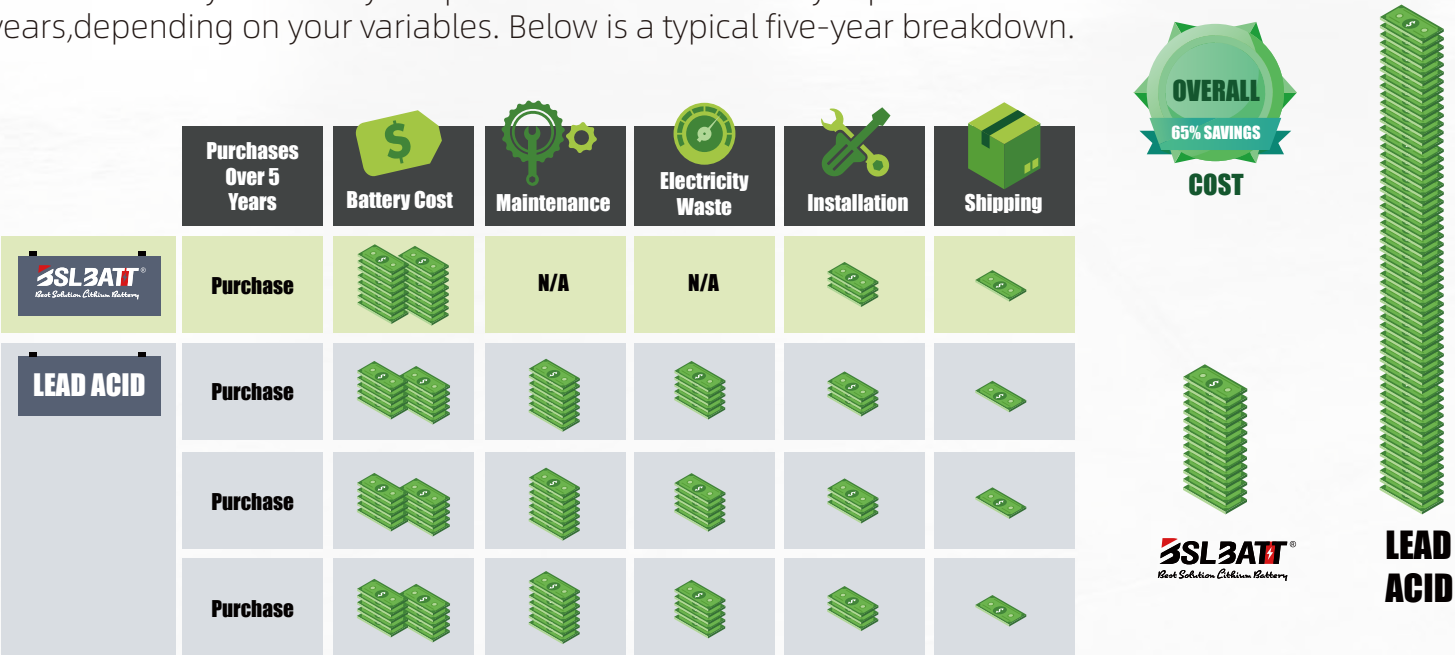
### The lithium-ion batteries can offer you...

- ⚡ Longer life reduces overall battery investment.
- ⚡ No maintenance saves labor and maintenance costs.
- ⚡ No gas or acid spills, avoids the space, equipment and running costs of a battery room and ventilation system.
- ⚡ Energy saving and less downtime, improve productivity.

**Do not  
hesitate,  
your ideal batteries  
are here.**

## FIVE YEARS COST COMPARISON

BSLBATT battery can save you up to 65% on forklift battery expenditures over five years,depending on your variables. Below is a typical five-year breakdown.



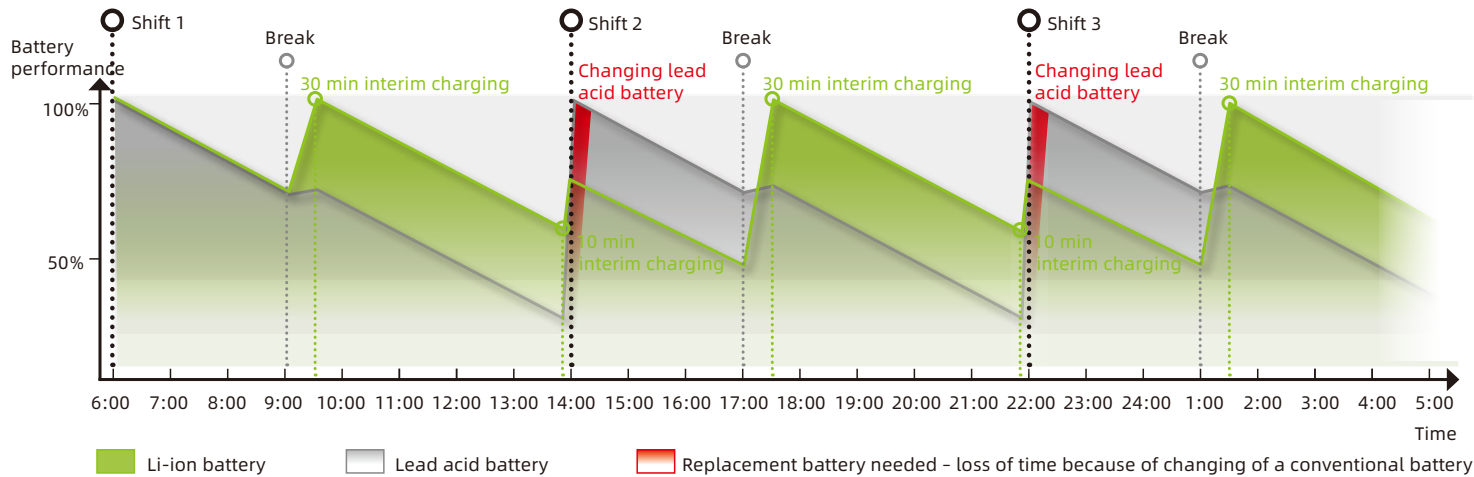


# Equipments always remain in service when needed

opportunity charge is the best solution for multi-shift.

- ⚡ Reduces the need for a full charge everytime.
- ⚡ Eliminates the need for frequent time-consuming of battery swaps.
- ⚡ Eliminates the risk of battery changing accidents.
- ⚡ The battery in the truck can be charged directly during short breaks, and can be recharged at any time.

Li-Ion Technology: Full performance during several shifts thanks to effective interim charging



## ADVANTAGES OF LITHIUM-ION VS. LEAD-ACID BATTERIES

CHARACTERISTICS	Lead-Acid Batteries	BSLBATT lithium-ion batteries
MAINTENANCE	Maintenance required Extra cost	No Maintenance No extra cost
CHARGING TIME	8-10 hours 2 or more batteries per truck required for continuous operation	Less than 2 hours 1 battery per truck is enough for continuous operation
OPPORTUNITY CHARGING	No Lower fleet availability due to charging breaks	Yes 100% fleet availability
BATTERY LIFE	1500 charge/discharge cycles Periodic battery replacement	2000 charge/discharge cycles No need to replace batteries
DANGEROUS SUBSTANCES	Yes Battery room is required	No, environmentally friendly Safe and clean technology Battery room is not required
ELECTRICITY CONSUMPTION	Consumes 35% more energy Higher electricity costs	Consumes 35% more energy Lower electricity costs



Save 70% expenses in 5 years

## Advanced lithium-ion power solutions

### Effucient power

- ⚡ High sustained power.
- ⚡ 3,500+ life cycles at 80% depth discharge.
- ⚡ Up to 10 years design life.

### Safe power

- ⚡ No acid spills, no combustibile gases emissions.
- ⚡ Automotive-grade components with advanced quality.
- ⚡ More thermal & chemical stability.

### Flexible power

- ⚡ Zero maintenance, no need for water top-ups or electrolyte checks.
- ⚡ No battery swapping for multi-shift operations.
- ⚡ No ventilation systems required.

## Intelligent charging managemment

Over-temperature protection

Short-circuit protection

Anti-reverse connection function

Smart display

Current limiting function

Automatic power off

Over-voltage protection

Timing protection

Wide voltage operation

Over-charge protection

Over-current protection

Constant current constant voltage

To use BSLBATT charger, the battery management system (BMS) can control the charging current according to different temperatures and SOC of the batteries.

BSLBATT’s intelligent BMS ensures the safety of the battery and improves the charging deficiency.

When the battery is at low voltage, the battery can be charged at low current to ensure battery safety.

When the battery is less than 10%, it will keep to prompt for charging.



## Simply Efficient



### Simply easy

Maintenance free operation: no need to refill water or check the acid level  
 User friendly: potentially no need to change batteries  
 Li-ion batteries maintain their performance level also at temperatures below freezing making them ideal for use in cold areas



### Simply powerful

The high energy density of the Li-ion battery ensures long operating times and increases the high availability of the truck  
 High availability by quick opportunity charging without the need to change the battery  
 Longer track performance thanks to stable voltage supply throughout the discharging process



### Simply safe

Intelligent battery management: all important functions are monitored  
 Less physical strain: potentially no need to change batteries  
 Increased user safety: thanks to acid-free operation  
 No emission of battery gasses



### Simply flexible

Opportunity charging at any mains wall outlet: no charging station required  
 Higher energy density for compact battery dimensions  
 Less organizational effort: pro-work checks and providing water are not needed



### Simply connected

Communication between vehicle and intelligent battery control: a perfectly coordinated energy system (industrial truck, Li-ion battery and intelligent battery management) enables a long service life and efficient use of the truck  
 Intelligent charge management: Protects the battery and extends the operating and service life



## MIXED FLEET SUPPORT

Compatible with Hyster-Yale, Crown, Toyota, Manitou, Clark, Raymond, Combilift, Jungheinrich, Doosan, Linde, Nissan, Hyundai, Caterpillar, JCB, Bobcat, KION group, UNICARRIERS, KOMATSU, HELI, HANGCHA, BYD, Mitsubishi, and more





# To know more of BSLBATT

LiFePO4 batteries

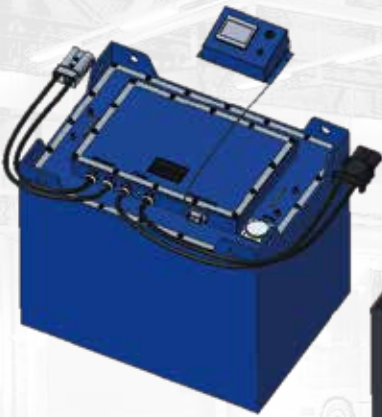


1x  
Battery per truck

6000+  
Life cycles

300A  
Std charging speed

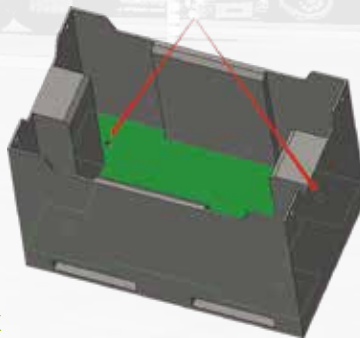
## LiFePO4 Forklift Battery Components



## Modular Technology

Your next truck might have a different compartment? Simply update your weight module to fit the new dimensions, weight and most optimized charge socket location.

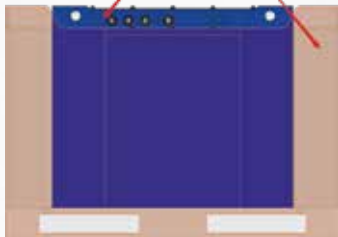
Distribution Box And Drainage Hole



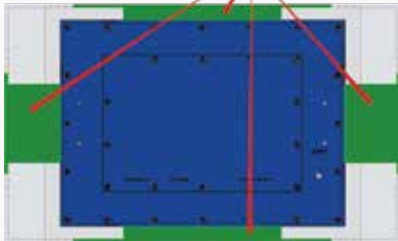
## Standard options

Web FleetManager  
300A charge speed  
Single 1200A connector  
Anti-Arcing  
OLED display  
Remote LED BDI  
Audible alarm  
Truck integration ready

Standard Box Weight Box



Clump Weight





LiFePO4 forklift batteries

Lithium drop-in replacements for lead-acid batteries.



24 V lithium battery

- For higher productivity, retrofit your fleet to lithium-ion batteries. These batteries keep your equipment in passions all day long.
- Power your equipment up to 3 shifts a day!



36 V lithium battery

- For higher productivity, put LiFePO4 to your fleets.
- Power your passion, boost your business!



48 V lithium battery

- Not just a battery, but a new work and life style.
- Increased productivity and batter performance for your fleets!



80 V lithium battery

- Switch to lithium batteries - the new technology will upgrade your fleets dramatically.
- Ideal for multi-shift operation.

Nominal Voltage	Lead Acid Equivalent	Series Number	Actual Capacity		Battery Dimensions (LxWxH)		Weight	
			[Wh]	[Ah]	[in]	[mm]	[lbs]	[kg]
24	12-85-5	B-LFP24-100	2560	100	24.6 x 8.1 x 24.7	624 x 207 x 627	467	212
		B-LFP24-135	3456	135	24.6 x 8.1 x 24.7	624 x 207 x 627	467	212
	12-85-13	B-LFP24-230	5957	230	24.6 x 11.2 x 24.7	624 x 284 x 627	635	288
		B-LFP24-280	7168	280	24.6 x 11.2 x 24.7	624 x 284 x 627	635	288
	12-125-13	B-LFP24-300	7680	300	24.6 x 11.2 x 24.7	624 x 284 x 627	635	288
		B-LFP24-405	10368	405	24.6 x 14 x 24.7	624 x 356 x 627	798	362
		B-LFP24-460	11776	460	24.6 x 14 x 24.7	624 x 356 x 627	798	362
	12-125-15	B-LFP24-540	13824	540	24.6 x 16.9 x 24.7	624 x 428 x 627	959	435
		B-LFP24-560	14336	560	24.6 x 16.9 x 24.7	624 x 428 x 627	959	435
	12-125-17	B-LFP24-615	15744	615	24.6 x 19.7 x 24.7	624 x 500 x 627	1131	513
		B-LFP24-675	17280	675	38 x 13.5 x 30.5	965 x 343 x 777	1624	727
		B-LFP24-840	21504	840	38.2 x 14.1 x 30.6	970 x 357 x 777	1838	834
36	18-125-11	B-LFP36-300	11520	300	37.8x 13.6 x 30.5	960 x 345 x 777	1640	744
		B-LFP36-405	15552	405	31.4 x 17.3 x 22.6	798 x 439 x 575	1146	520
	18-125-13	B-LFP36-460	17664	460	38 x 13.3 x 30.5	965 x 337 x 775	1649	748
		B-LFP36-540	20736	540	38.1 x 15.6 x 30.5	969 x 397 x 775	2359	1070
	18-125-15	B-LFP36-560	21504	560	38.5 x 18.1 x 30.4	978 x 461 x 772	2597	1178
	18-125-17	B-LFP36-615	23616	615	38.5 x 27.1 x 22.6	978 x 689 x 575	2002	908
	18-85-13	B-LFP36-690	26496	690	38.3 x 20.2 x 30.5	973 x 512 x 775	2597	1178
	18-85-17	B-LFP36-840	32256	840	38.5 x 33.8 x 22.6	978 x 859 x 575	3000	1361
	18-85-19	B-LFP36-920	35328	920	38.7 x 38.5 x 22.6	982 x 978 x 575	3492	1584
	18-85-25	B-LFP36-1120	43008	1120	44.1 x 43.5 x 22.6	1120 x 1105 x 575	4001	1815
Environment temp.rage								
Charge			Discharge		Storage (1 month)		Storage (1 year)	
-4°F~131°F (-20°C~55°C)			-4°F~131°F (-20°C~55°C)		-4°F~131°F (-20°C~55°C)		-32°F~95°F (0°C~55°C)	

\*\* For more forklift lithium batteries request, please contact our sales for support .





Specifications for 48 V / 80 V system

Nominal Voltage	Lead Acid Equivalent	Series Number	Actual Capacity		Battery Dimensions (LxWxH)		Weight	
[V]			[Wh]	[Ah]	[in]	[mm]	[lbs]	[kg]
48	24-125-13	B-LFP48-300	15360	300	32.7 x 20.6 x 24.7	830 x 522 x 627	1561	708
	24-85-15	B-LFP48-405	20736	405	32.7 x 20.6 x 24.7	830 x 522 x 627	1561	708
	24-85-17	B-LFP48-460	23552	460	32.7 x 20.6 x 24.7	830 x 522 x 627	1561	708
	24-85-19	B-LFP48-540	27648	540	32.7 x 24.8 x 24.7	830 x 630 x 627	1887	856
	24-85-21	B-LFP48-560	28672	560	32.7 x 24.8 x 24.7	830 x 630 x 627	1887	856
	24-85-25	B-LFP48-615	31488	615	32.7 x 29.1 x 24.7	830 x 738 x 627	1887	856
		B-LFP48-690	35328	690	32.7 x 29.1 x 24.7	830 x 738 x 627	2233	1013
	24-85-27	B-LFP48-840	43008	840	32.7 x 33.3 x 24.7	830 x 846 x 627	2561	1162
		B-LFP48-920	47104	920	32.7 x 37.6 x 24.7	830 x 954 x 627	2561	1162
		B-LFP48-1120	57344	1120	32.7 x 37.6 x 24.7	830 x 954 x 627	2899	1315
80	40-125-11	B-LFP80-280	23296	280	40.4 x 22.2 x 24.7	1026 x 564 x 627	2127	965
		B-LFP80-300	24960	300	40.4 x 22.2 x 24.7	1026 x 564 x 627	2127	965
		B-LFP80-405	33696	405	40.4 x 22.2 x 24.7	1026 x 564 x 627	2127	965
		B-LFP80-460	38272	460	40.4 x 27.9 x 24.7	1026 x 708 x 627	2668	1210
		B-LFP80-540	44928	540	40.4 x 33.5 x 24.7	1026 x 852 x 627	3214	1458
		B-LFP80-560	46592	560	40.4 x 33.5 x 24.7	1026 x 852 x 627	3214	1458
		B-LFP80-615	51168	615	40.4 x 33.5 x 24.7	1026 x 852 x 627	3214	1458
		B-LFP80-690	57408	690	40.4 x 39.2 x 24.7	1026 x 996 x 627	3794	1721
		B-LFP80-840	69888	840	40.5 x 39.3 x 30.9	1028 x 999 x 784	4802	2178
		Environment temp.rage	Charge -4°F~131°F (-20°C~55°C)	Discharge -4°F~131°F (-20°C~55°C)		Storage (1 month) -4°F~131°F (-20°C~55°C)		Storage (1 year) -32°F~95°F (0°C~55°C)

\*\* For more forklift lithium batteries request, please contact our sales for support .



Heavy Forklift Lithium Battery Specifications

Nominal Voltage	Series Number	Actual Capacity		Battery Dimensions (LxWxH)		Weight	
		[KWh]	[Ah]	[in]	[mm]	[lbs]	[kg]
Heavy forklift	B-LPF121.6-1260	153.2	1260	69.7 x 56.3 x 35.4	1770 x 1430 x 900	12346	5600
	B-LPF80-1240	99.2	1240	58.9 x 39.2 x 30.7	1495 x 995 x 780	7981	3620
	B-LPF83.2-960	79.9	960	40.8 x 50.7 x 30.9	1037 x 1287 x 784	6226	2824
	B-LPF121.6-1400	1400	1400	69.7 x 56.3 x 32.3	1770 x 1430 x 820	12346	5600
Environment temp.rage		Charge -4°F~131°F (-20°C~55°C)	Discharge -4°F~131°F (-20°C~55°C)	Storage (1 month) -4°F~131°F (-20°C~55°C)	Storage (1 year) -32°F~95°F (0°C~55°C)		

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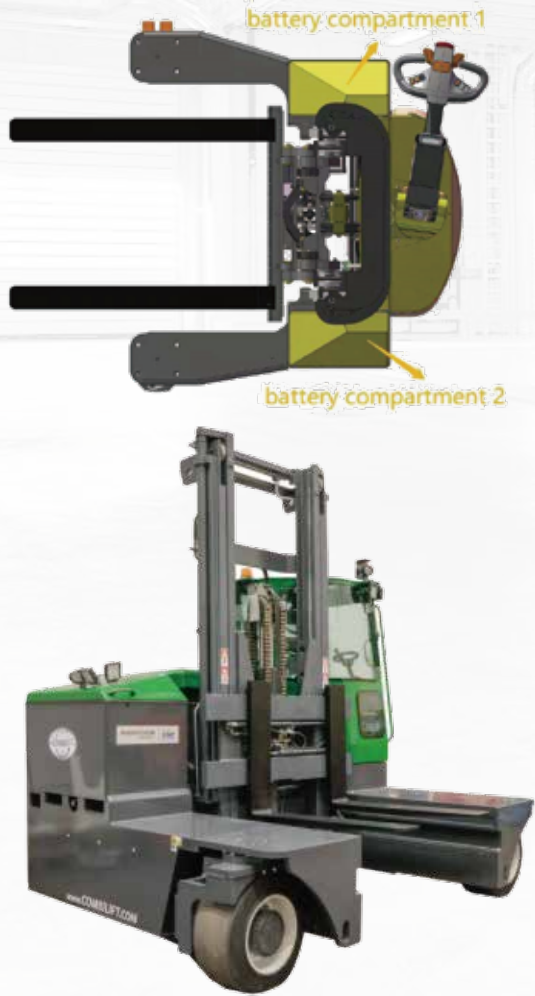




Specifications for combilift

Forklift Brand	Battery Compartment L*W*H /mm	Original SLA Battery	Weight Request	LiFePO4 Request Wholy
Combilift C8000ET	Large battery compartment	56V 1000AH 1640KG	min. 1500KG	80V 800AH~900AH
	Small battery compartment 976*418*625	24V 1000AH 720KG	min. 650KG	
Environment temp.range	Charge -4°F~131°F (-20°C~55°C)	Discharge -4°F~131°F (-20°C~55°C)	Storage (1 month) -4°F~131°F (-20°C~55°C)	Storage (1 year) -32°F~95°F (0°C~55°C)

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Smart display

Once the charger is connected, it will show the battery status for remaining charging time, and the operator can leave the truck between shifts or have a rest.

Where does BSLBATT lithium-ion batteries to charge?  
Flexible

- The batteries can be charged on the truck, no frequent battery swaps or no extra battery storage room needed.
- The charging stations do not need a specific location with adequate ventilation system cause of no noxious gas emissions when charging.
- The charging can be using anywhere convenient for the working areas of the electric forklifts.

Compare to the charging location for lead-acid batteries:

Needs extra batteries and battery storage room for swapping, cause they cannot be charged on the truck.

Needs specific charging room with ventilation system for noxious gas when charging.

TIPS

How to charge?  
Easy and safe



01 Drive to the forklift battery station

Drive to the forklift battery station, switch off, plug in the charging cable and apply the parking brake.



02 Automatically monitor

The charger and forklift will automatically monitor whether the safety environment and battery condition is suitable for charging, and if ok, the charger and forklift will automatically start charging.



03 Fully charged

When the battery is fully charged, charging will stop automatically.

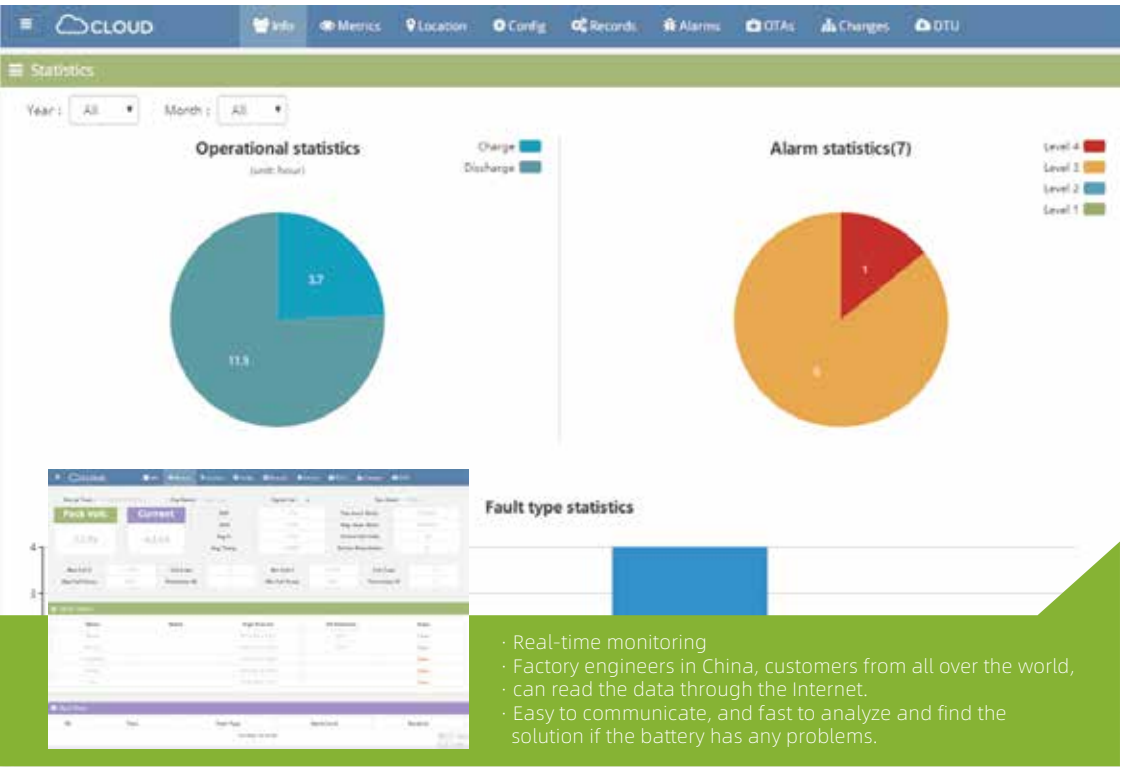
! During the charging process, without disconnecting the plug, the forklift cannot be started.



# 4G module

## Display description

- ④ The complete information of the console inter face is shown in the following figure:
- ④ The console displays the interface diagram
- ④ Alarm information display interface diagram
- ④ Single voltage display interface diagram
- ④ Screen interface settings display the interface diagram
- ④ Monomer temperature display interface diagram



Create fleets.  
Monitor each of your batteries:

- (SOC) State of charge
- (SOH) State of health
- Productivity
- Detailed charge/discharge events
- Errors
- Energy usage
- Temperature
- Life Cycle

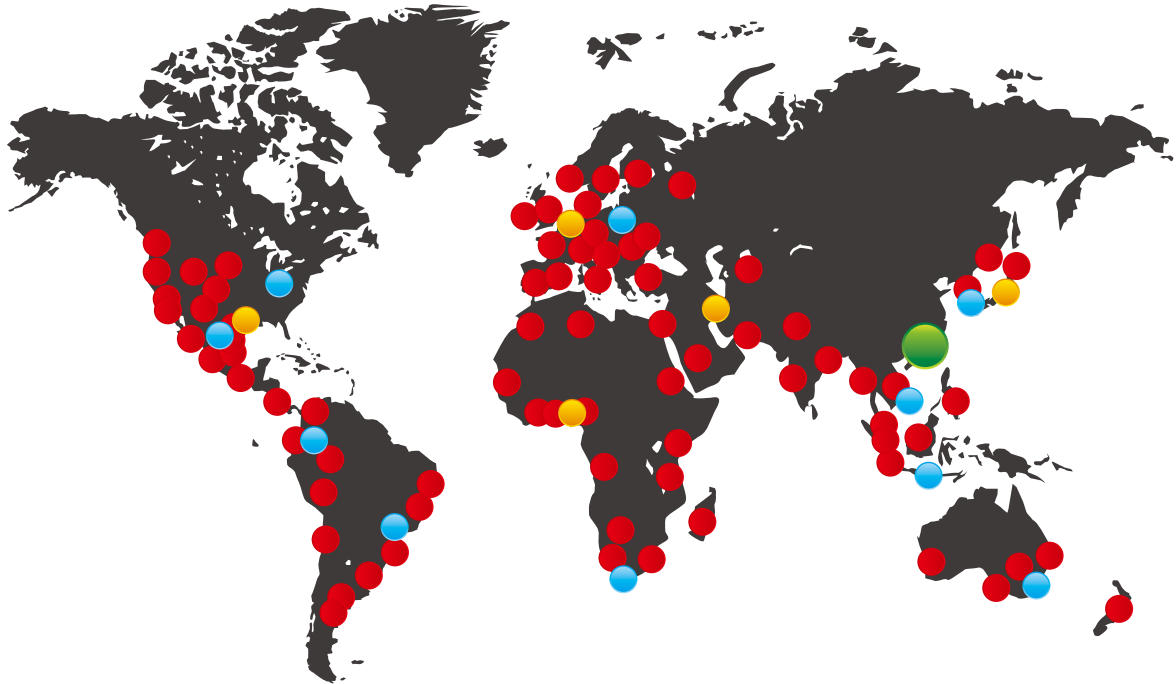
## Cloud platform



## Global sales and service network system

- ⚡ Timely delivery.
- ⚡ Hassle-free after-sale service.
- ⚡ Fast response technical support.

BSLBATT has comprehensively unfolded its overseas market layout to realize the localization of R&D, manufacturing, marketing and service, then become your most reliable partner.



● Dealer layout ● The company's headquarter ● Global processing centers ● Global branches and storage/after-sales centers

## Authorized Dealers of BSLBATT Forklift Battery in the WORLD

Special support to dealers from BSLBATT



### 01 Financial Support

Return in the end of the year if acheive annual sales target. Co-organized exhibitions and exchanges by customers (the cost may be split 50/50).

### 02 Provide technical support

Provide technical training/product training / After-sales the training to dealer team.

### 03 Sales Material Support

Catalogs, Videos, Picture Material, Shirt with BSLBATT logo, Etc.

### 04 Potential Customers Sources

Provide and transfer some inquiries or potential customer information to dealer directly.

### 05 Quick-wear Part Back up Support

Provide some quick-wear parts for backup to meet some emergencies after-sales.

### 06 Agency Mode (service and support for agents)

We offer price protection to regional dealers.