

# LITHIUM

EP DIN



**EP ENERGY**

DIN Battery 48V-280Ah/460Ah Series

**LI-ION**

- Fully compatible with the forklifts using 4PzS, 5PzS, and 6PzS batteries
- Productivity boost with opportunity charging
- Long battery life with less maintenance costs
- BMS system to maximize the battery life time
- Real-time battery monitoring display and power switch

**EP EQUIPMENT CO.,LTD**  
[www.ep-ep.com](http://www.ep-ep.com)



## Feature

### ■ Fully compatible with the forklifts using 4PzS, 5PzS, and 6PzS batteries

EP DIN battery has full compatibility with the forklifts using 4PzS, 5PzS, and 6PzS batteries, meeting the requirements of DIN Standard.

### ■ Productivity boost with opportunity charging

EP DIN battery is capable of 0.5C charging. It can be charged up to 7% in 10 minutes. Operators can take advantages of shift breaks to charge the trucks, which can be extremely helpful in reducing downtime.

### ■ Real-time battery monitoring display and power switch

EP DIN battery offers a battery indicator which can be equipped in the cabin. Operators can monitor the battery condition in real time and control power supply during an operation.

### ■ Long battery life with less maintenance costs

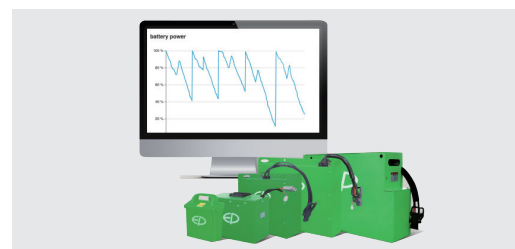
EP DIN battery comes with a naturally long life cycle thanks to Li-ion technology. It is maintenance-free and assures workplace safety with no water filling, air ventilation, and acid spills required.

### ■ BMS system to maximize the battery life time

EP's BMS system constantly monitors the status of the battery such as the temperature of the battery cells and it calculates the batteries' state of charge. It keeps the battery in a safe and stable condition.



Battery life span (complete charge and discharge cycles)	
Li-ion Battery	Lead-acid Battery
>2000 times	1000 times

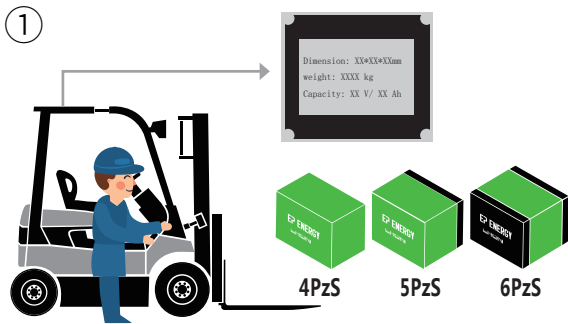


# Installation

EP DIN battery is EP's Li-ion battery that is highly customized for forklifts using 4PzS, 5PzS, and 6PzS batteries. You can easily swap your forklift battery with EP DIN battery without adjustments in the following six steps:



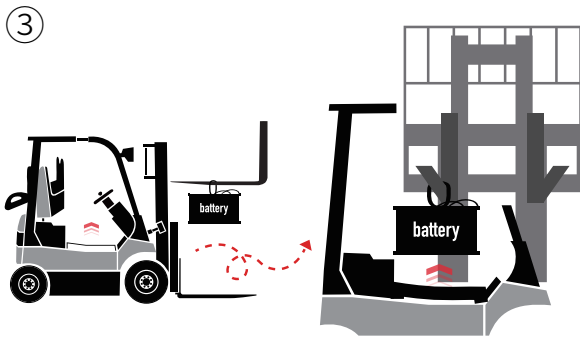
Scan the QR Code to view installation tutorial.



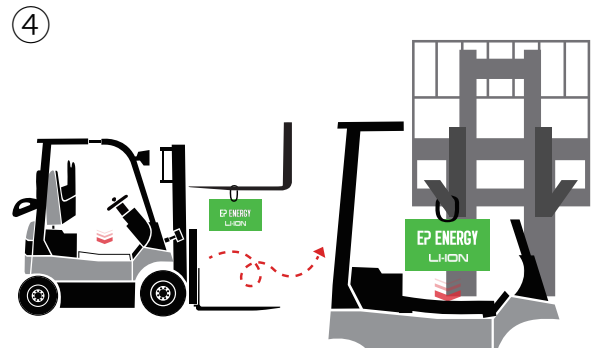
Check the required dimension and weight and choose the right battery.



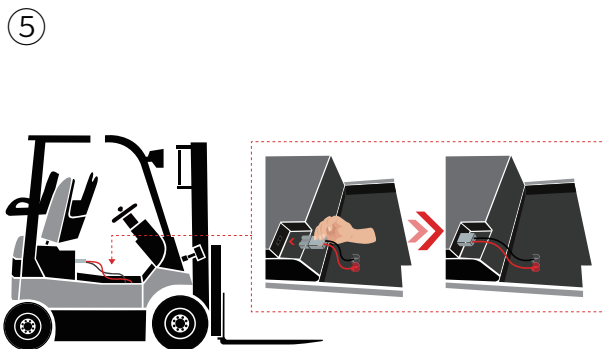
Lift up the driver seat and disconnect the battery.



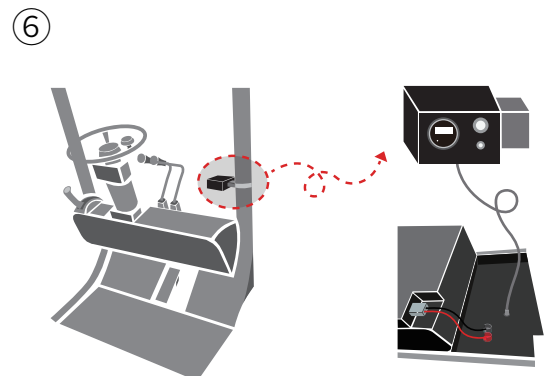
Hang the original battery by another forklift.



Place in the EP Li-ion battery.



Plug in the EP Li-ion battery.

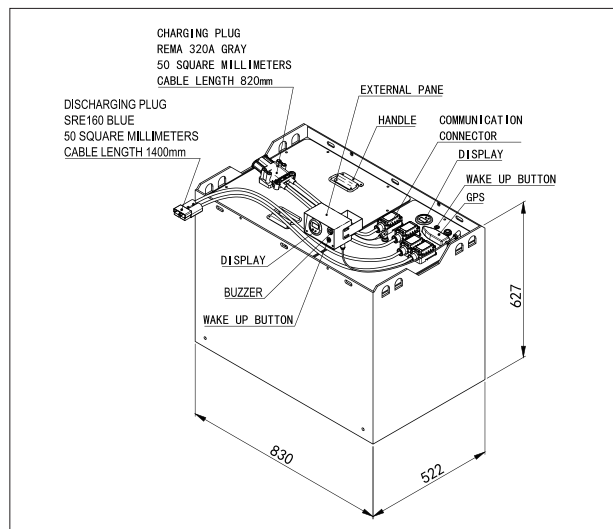


Attach the battery indicator to the cabin.

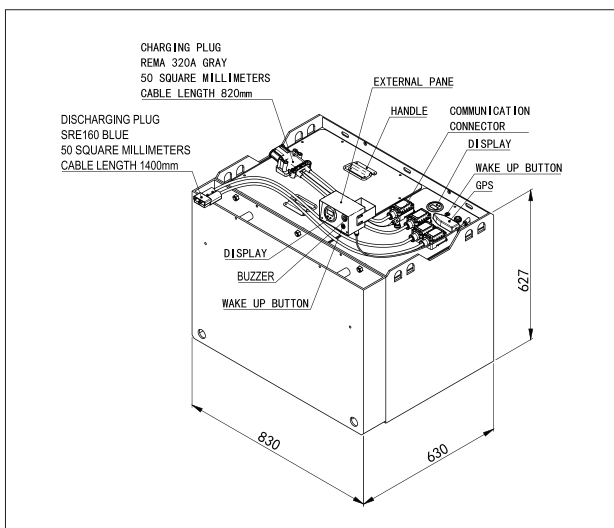
# Parameters

	4PzS	5PzS	6PzS
Battery Color	Black	Black	Black
Nominal Capacity(Ah)	280 / 460 Ah	280 / 460Ah	280 / 460Ah
Nominal Voltage(V)	48V	48V	48V
Standard Charge Current(A)	150A	150A	150A
Protection Class	IP 54	IP 54	IP 54
Battery Weight(kg)	714	863	1012
Box Dimensions(mm)	830*522*627	830*630*627	830*738*627
Operating Temperature-Discharge(°C)	-20°C-55°C	-20°C-55°C	-20°C-55°C
Operating Temperature-Charge(°C)	0°C-40°C	0°C-40°C	0°C-40°C
230V Single Phase Charger	Option	Option	Option
Integrated Charger	Option	Option	Option

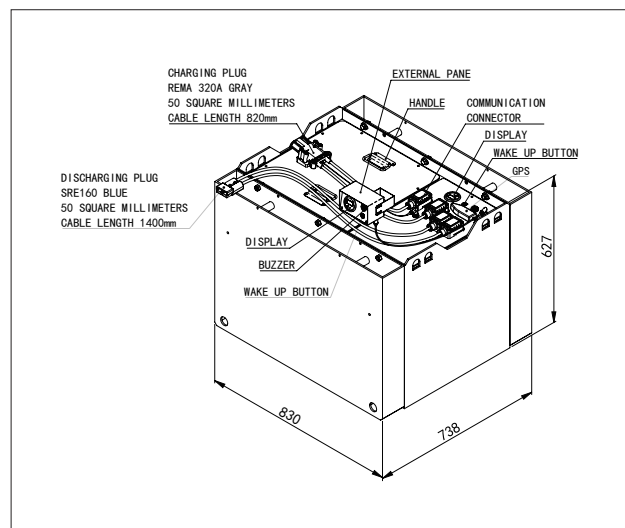
## ■ 4PzS



## ■ 5PzS



## ■ 6PzS



## Warranty

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Save your maintenance effort with EP's superior warranty. Your money will be well spent. For batteries with capacity >250AH: EP Energy provides 60 months or 5,000 hours, which comes first, for the battery cell and 24 months for parts.

### **FAQS** »

#### **■ What is the life expectancy of the battery?**

Generally, the Lithium ion batteries can live as long as the truck. EP warrants that the Li-ion battery technology will provide you with 2,000 complete charge and discharge cycles and still ensure over 80% of usable capacity. Replacement with Li-ion is not necessary anymore.

#### **■ What happens if we keep charging the batteries? Does it affect battery life?**

EP Li-ion battery comes with battery management systems(BMS). When the battery is fully charged, it will automatically power off. This will not affect the lifetime of Li-ion battery. The battery prefers quick charges. So charging during break times is the new normal way of working with batteries.

#### **■ How do Li-ion batteries perform in environment of extreme temperatures?**

The batteries can run in relatively extreme temperatures, from minus 20 degrees to up to 55 degrees. The more comfortable the battery feels, the longer its lifetime.

#### **■ Exchanging Li-ion battery, does it affect truck performance**

No, a truck performance should not be affected by energy supply. EP DIN battery is specially designed as Li-ion replacement to the forklifts using 4PzS, 5PzS, and 6PzS batteries. There is no additional adjustment needed when exchanging the batteries, nor the changes of conditions on driving performance after the installation.

#### **■ What is BMS system and how does it work?**

The BMS plays a crucial role to protect the battery against over and under voltage and over and under temperature. The BMS also balances the cells. This system secures the battery longevity and improves battery performance. Also charging is optimized and charging and discharging cycles are stored in its memory. The data can be read on the display, PC or online with the optional Telematics system.