

BEFORE INQUIRING ABOUT LFP CELLS

Before you inquire with EV Power about purchasing LFP (LiFePO₄) cells please consider the following points:

1) Price quotation requests without a short explanation of the intended application and your level of experience will not be answered. We are generally too busy and prices vary according to volume and exchange rate fluctuations. On first request we may give you a ball park figure to see if it is in your budget range. If it is we will offer more detail and if you wish to proceed, a quotation. If you are an EV enthusiast you are our most difficult customer! If you squeeze us on the price it limits our ability to provide the best after sales service.

2) Know what you are doing. It is essential that you have a good working knowledge of electricity (AC and DC). Competence is required in using tools, multimeters and soldering irons. You must be familiar with terms such as DoD and Ahr. If we get the idea that you are not competent or are inclined to take shortcuts and risks we will not sell you batteries. You will cause trouble for yourself and us.

3) Size your battery system appropriately. Many battery manufacturers make exaggerated claims about their products. For long life EV Power recommends some rules of thumb. For LFP cells the continuous average current draw should not exceed 0.8CA. For example a 100Ah cell should not be drawn continuously at greater than 80 Amps (average). The peak current draw should not exceed 3-4C for more than a few seconds. You can go higher but battery life will be reduced. This is true for all prismatic LiFePO₄ cells.

4) Select the voltage range carefully. LFP cells in most circumstances require specialized chargers. We have chargers available in a limited range of sizes so please ask for advice before choosing system size. **A battery management system is required on all LFP batteries.**

5) Take into account DoD when calculating range or discharge duration. Allow at least a 20% safety margin and do not go below it when discharging LFP batteries. In other words there is 80% of the specified capacity to use in most applications. Do not rely on the BMS to terminate discharge or charge. Generally work on about 180 Whrs/km for a small EV to calculate the range.

6) Engineer the application around the batteries. Some customers go to great lengths to squeeze the battery system into the smallest possible space. Often they distribute cells in different inaccessible places and mount them in non-vertical positions and invariably have problems. Think about the space you have before you order and save time and money. Cell sizes and weights are on the EV Power website. Please don't ask us to design your battery pack unless you are prepared to pay for the service.

7) Large battery packs are not kept in stock. Only a small number of cells are in stock at any time. We generally place bulk orders with the factory at regular intervals to supply orders of fresh cells to clients at a discounted price. Please take this into account when considering your timeline.

8) There is a 12 month factory warranty. Despite what some people may say it is extremely rare for a LFP cell to fail without a reason. In the event of a cell failure EV Power will help with a factory claim but does not offer any other additional warranty. Nor is any warranty offered if the BMS causes cell damage as we have no control over how the system is installed.

9) Goods remain the property of EV Power Australia until full payment is made. Quoted prices are always subject to change without notice due to exchange rate fluctuations.

In no event will EV Power Pty Ltd be liable for any direct, indirect, incidental, special or consequential damages of any kind.