

6-string lithium battery pack

Can a lithium ion battery pack have multiple strings?

Whenever possible, using a single string of lithium cells is usually the preferred configuration for a lithium ion battery pack as it is the lowest cost and simplest. However, sometimes it may be necessary to use multiple strings of cells. Here are a few reasons that parallel strings may be necessary:

What is a battery pack?

They may be configured in series, parallel or a mixture of both to deliver the desired voltage, capacity, or power density. Packs are identified by cell size, number of cells, battery structure, chemistry, chargeability, capacity, and voltage rating. Lithium-Ion Battery Products - Battery Packs are in stock at Digikey.

Where can I buy lithium-ion battery products?

Lithium-Ion Battery Products - Battery Packs are in stock at Digikey. Order Now! Lithium-Ion Battery Products ship same day

Why should lithium ion strings be paralleled?

This is essential to prevent the strings from runaway in the event of imbalance between cells or a cell failure. Never leave two lithium ion strings permanently paralleled or leave multiple strings paralleled without monitoring systems and a means of automatic disconnection.

Why is a single string battery set-up important?

A single weak or bad cell can exponentially lower the capacity of the entire battery pack. A properly engineered system can improve the overall reliability, but only when additional equipment and significant engineering time is invested. Whenever possible, a single string set-up should be considered.

Should a battery pack be paralleled?

Paralleling strings together greatly increases the complexity of managing the battery pack and should be avoided unless there is a specific reason to use this configuration. In this setup, each string must essentially be treated as its own battery pack for a variety of reasons. In a below example, 2 strings of 8 cells each are placed in parallel.

They may be configured in series, parallel or a mixture of both to deliver the desired voltage, capacity, or power density. Packs are identified by cell size, number of cells, battery structure, ...

Web: <https://edukacja-aktywna.pl>

