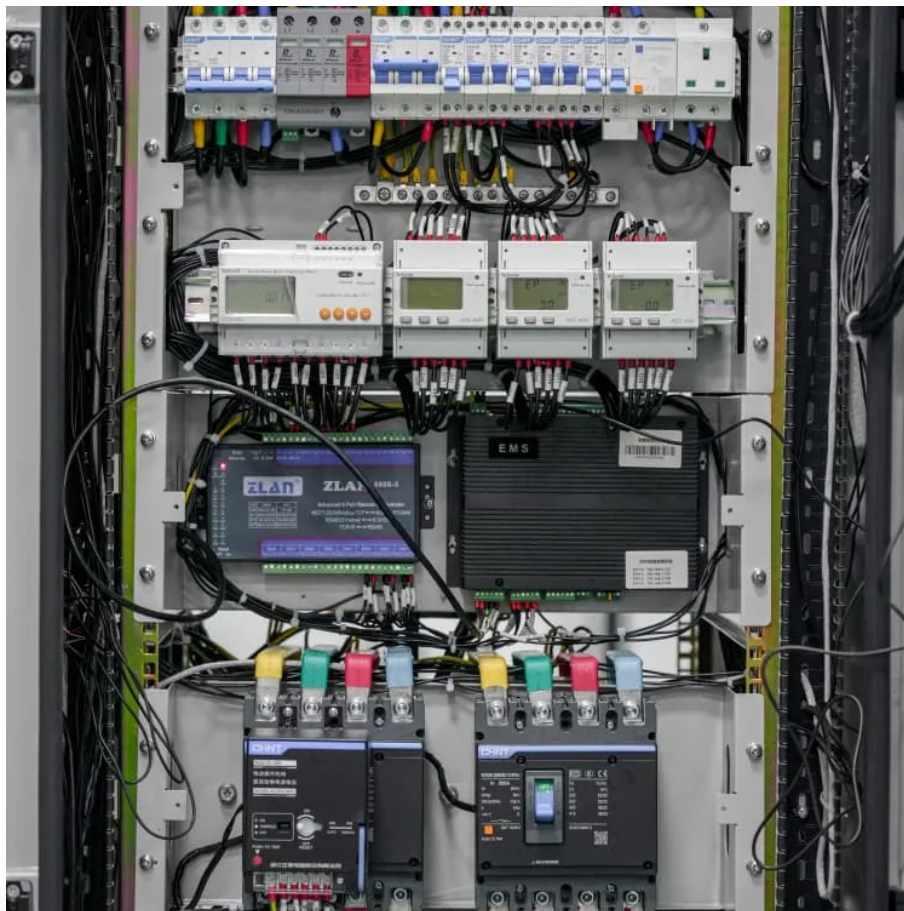


PDEOZE PowerContainer

Huawei lithium battery string number and capacity selection



Overview

What is the voltage of a lithium ion battery cell?

The voltage of a single lithium-ion battery cell is low. If 3.2 V LFP cells are adopted, 160 cells need to be connected in series to provide the battery voltage of 512 V DC. The charge and discharge currents (I) of the cells connected in series are the same.

How to perform a capacity test for each battery string?

Principle for performing a capacity test for each battery string: In normal mode, the capacity test is performed on each Lithium-ion battery cabinet connected in parallel one by one. After a battery string is discharged for the capacity test, it is fully charged immediately.

How does a battery string sharing system work?

Multiple battery strings form an energy resource pool, and multiple systems can obtain energy from the pool. The working manner of each system is similar to that of the preceding battery string sharing solution used for a single power supply.

What is a lithium ion battery?

A Lithium-ion battery has a larger capacity than a lead-acid battery of the same size. With the large-scale commercial use of Lithium-ion batteries, the price of Lithium-ion batteries decreases rapidly. It has become a trend to replace traditional lead-acid batteries with Lithium-ion batteries in data centers.

Are $n+1$ lithium-ion battery cabinets configured for a $2n$ system?

In conclusion, $N+1$ Lithium-ion battery cabinets are configured for the Lithium-ion battery resource pooling system in a $2N$ system. If a short circuit occurs but not on the bus of the combiner cabinet, a single Lithium-ion battery cabinet stops supplying power and the $2N$ system supplies power properly.

Why do data centers use lithium-ion batteries?

Abstract: Lithium-ion batteries have many advantages, such as small size, light weight, and a long service life. An increasing number of data centers use Lithium-ion batteries to replace traditional lead-acid batteries. To improve reliability, data centers usually use the dual-bus and multi-bus architecture.

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Jan 26, 2021 · During a capacity self-test of a single battery string, the Lithium-ion battery cabinet and battery module can collect battery voltage and current information to calculate the SOH of ...

*1 Test conditions: 100% depth of discharge (DoD), 0.2C rate charge & discharge at 25 °C, at the beginning of life. If no PV modules are installed or the system has not detected sunlight for at ...

Oct 1, 2020 · Charge/discharge derating occurs when the operating temperature from -10°C to 5 °C. Refer to battery warranty letter for conditional application. Available in Q1, 2021 Storage ...

The lithium battery page is displayed, as shown in Figure 9-7. Figure 9-7 Lithium battery page. Select the lithium batteries to reset, click Reset, and click a button in the Confirm dialog box as ...

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