

SolarTech Power Solutions

21700 battery cell capacity parameters



Overview

What voltage does a 21700 battery run?

The 21700 battery operates at a nominal voltage of 3.7V, with a full charge voltage of 4.2V and a discharge cutoff voltage of 3.0V. This voltage range aligns with industry standards for lithium-ion batteries, ensuring compatibility with various devices and systems.

What are the technical specifications of 21700 battery?

Here we have listed all the possible technical 21700 battery specifications that can be very useful in executing any technical design of your product or gadgets. The 21700 battery is a Li-ion battery named after its 21mm × 70mm cylindrical size (diameter × height).

How much does a 21700 cell weigh?

The 21700 cell weighs approximately 60–70 grams, depending on the manufacturer and specific chemistry. While slightly heavier than the 18650 cell, this weight increase is justified by its higher capacity and energy density.

Why is 21700 lithium battery a good choice?

It is good to see 21700 lithium cells gives the ability to compete and provide the replacement option to the corded tools in all-around areas by providing longer run time. Its safety property along with its high output current and energy capacity makes this battery popular among tech industries.

How many volts does a IRR 21700 battery take?

This battery comes with Lithium Manganese Oxide chemistry, and the nominal voltage for the battery is 3.6 to 3.7 volts per cell, and the high recommended charging voltage for the battery is 4.2 volts. The IMR battery comes with a small capacity and has features for providing larger current values. INR 21700 batteries.

Why is a 21700 cell a good choice?

The larger size of the 21700 cell enables it to store more energy, making it ideal for applications requiring high power capacity, such as electric vehicles and industrial battery packs. Its dimensions also contribute to better thermal management, ensuring safer and more efficient operation.

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Thermal management of 21700 Li-ion battery packs

Jan 5, 2024 · Due to its increased cell size, LIB 21700 (Lithium-ion battery) format has surpassed the existing formats as it offers larger capacity and higher energy density. However, the battery ...

TerraE_Cell Certifications_I NR_21700_50E2_EN dd

Jun 7, 2024 · 7.1.1 Charging shall consist of charging at a 0.2C constant current rate until the cell voltage reaches 4.2V. The cell shall then be charged at constant voltage of 4.2V while tapering ...



Product Specifications Document No: 50/352

Jun 7, 2021 · The design of battery pack and its structure should be reviewed physically, mechanically and electrically not to cause cell imbalance or other dangerous effects.

Thermal parameters of cylindrical power batteries: Quasi ...

Oct 11, 2022 · The subsequent thermal analysis on the thermal design of cylindrical batteries is also conducted based on the measured thermal parameters, which facilitate appropriate

...



21700 Battery Features, Types, Dimensions, & Uses

Jun 9, 2025 · The battery capacity is in the range of 3000 to 500 mAh according to model, design, and chemistry. Battery charging and discharging current ...

21700 Battery Cell 3.7V 4800mAh Datasheet

Dec 24, 2022 · Lithium ion Ternary Battery Cell 21700 4800mAh 3.7V without Protection Circuit Module (PCM)
This data sheet describes the requirements and properties of lithium polymer ...



Heat generation



quantification of high-specific-energy 21700 battery

In addition, based on the obtained variable specific heat capacity, the heat generation characteristics of the 21700 battery under different operating conditions were analysed. The ...

What Are the Key Specifications of the 21700 Cell?

Apr 11, 2025 · With its 21mm diameter and 70mm length, this cylindrical power source delivers up to 4800mAh capacity while maintaining robust thermal management. Engineers particularly ...



21700 Battery Cell 3.7V 4800mAh Datasheet

Dec 24, 2022 · Specification Lithium ion Ternary Battery Cell 21700 4800mAh 3.7V without Protection Circuit Module (PCM) This data sheet describes the requirements and properties of ...

Investigation of Convective and Radiative Heat

Transfer of 21700 ...

Jun 26, 2025 · Due to their high energy density and power potential, 21700 lithium-ion battery cells are a widely used technology in hybrid and electric vehicles. Efficient thermal ...



Heat generation quantification of high-specific-energy 21700 battery

Feb 5, 2021 · Whether optimizing the heat generation characteristics of the battery cell or designing a suitable thermal management system for a power battery, it is necessary to know ...

Li-ion Cylindrical Rechargeable Battery Specification Sheet

Sep 27, 2024 · 1 2 Base Cell Model
Capacity [mAh] Rated Voltage [V] Charge
Cut-off Voltage [V] Discharge Cut-off
Voltage [V] 3 4 5 This Specification sheet
describes the basic performance, ...



Everything You Need to

Know About Lithium-Ion 21700 Battery



1. What is a 21700 Battery? The 21700 battery is a larger type of lithium-ion rechargeable battery that has gained considerable popularity for its high capacity and improved performance ...

What Are the Key Specifications of the 21700 Cell?

Apr 11, 2025 · The 21700 lithium battery cell has emerged as a pivotal innovation in energy storage solutions. With its 21mm diameter and 70mm length, this cylindrical power source ...


☒ IP65/IP55 OUTDOOR CABINET

☒ OUTDOOR MODULE CABINET

☒ OUTDOOR 5G BASE STATION CABINET

☒ WATERPROOF

Characterizing and predicting 21700 NMC lithium-ion battery ...

Jun 5, 2022 · As the battery capacity increases, the internal resistances of the cell decreases [11]. Due to lack of information about the internal short circuit resistance in the 21,700 LIBs, ...



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