



# Low temperature 21700 battery cells





## Overview

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Ultra-Wide Operating Range: Performs flawlessly from  $-40^{\circ}\text{C}$  to  $55^{\circ}\text{C}$  for Arctic to moderate climates. High Energy Density: 21700 cells deliver 242 Wh/kg, maximizing runtime in compact devices. Fast Charging: Full charge in 1.5 hours with 0.5C current support.

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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 management is essential for maximizing the performance and capacity of Li-ion cells in both low- and high-temperature operating.

Lithium-ion batteries, including 18650 and 21700 cells, are widely used in various applications, from electric vehicles to portable electronics. However, their performance is highly sensitive to temperature changes. Understanding how temperature affects battery performance is vital for optimizing.

Power critical scientific instruments, data loggers, and sensors in extreme cold ( $-40^{\circ}\text{C}$ ). Ideal for meteorological stations, ice core sampling tools, and remote communication devices requiring stable energy in prolonged sub-zero conditions. Reliable energy for emergency beacons, GPS units, medical.

However, low-temperature environments still significantly impact the performance of ternary lithium batteries. During cold winter weather, UAVs often experience reduced battery endurance, insufficient power, or even an inability to discharge, failing to meet consumer demands for extreme climate.

Using brand new A-grade low-temperature battery cells, it has the highest energy density and stability on the market Adopt BMS software management chip, accurate data transmission, precise temperature control to eliminate safety hazards to the greatest extent Comprehensive safety protection.

Long-term research in high-performance electrode materials, explosion-proof



batteries, and low-temperature batteries, with a solid scientific research background and rich practical experience. The 21700 battery is a cylindrical lithium-ion battery with a diameter of 21mm and a length of 70mm. It.



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### [Understanding the 21700 Battery and Its Specifications](#)

The 21700 battery, with 21mm diameter and 70mm length, offers 3.7V voltage and up to 5,000mAh capacity, making it ideal for high-power applications.

### [Samsung 40T 21700 4000mAh 35A Battery , Online Store , US](#)

These cells are also available in all kinds of lithium-ion cells including 18650,21700,36500 cylindrical cells. Store the battery at low temperature (below 20°C is recommended) due to low ...



### [Glida 21700-12V-4Ah low temperature lithium battery](#)

Using brand new A-grade low-temperature battery cells, it has the highest energy density and stability on the market. Adopt BMS software ...

### [Unrevealing the effects of low temperature on cycling life of 21700](#)

This work provides comprehensive understanding of the failure mechanism of the 21700-type cylindrical batteries at low temperatures, and may



open up a new avenue to ...



### Degradation behavior of 21700 cylindrical lithium-ion battery cells

This study unveils the thermo-electrochemical behavior of overdischarged 21700 cylindrical LIB cells at -20 °C and 25 °C. Also, a thermo-electrochemical model was built to explain the heat ...



### How Temperature Affects 18650 and 21700 Battery Performance

Discover how temperature changes impact the performance, lifespan, and safety of 18650 and 21700 batteries. Learn optimal temperature ranges and tips for maintaining battery efficiency.



### Tenergy 3.6V 5000mAh Li-ion 21700 battery with ...

- when working with Li-ion cells, they are very sensitive to charging characteristics and may explode if mis-handled. - users should have ...



## Investigation of Convective and Radiative Heat Transfer of 21700 ...

In this series of measurements, the change in cell temperature during discharge of 21700 Li-ion battery cells at various constant discharge rates (1xC...5xC) was investigated.



## Understanding the 21700 Battery and Its

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Long-term research in high-performance electrode materials, explosion-proof batteries, and low-temperature batteries, with a solid ...



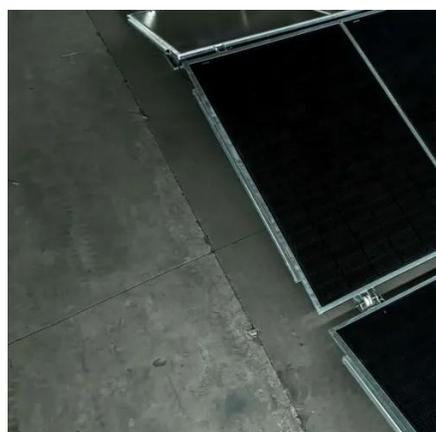
## Far East Battery's 21700-6000mAh High-Capacity Cell Breaks Through Low

Its ultra-wide temperature range capabilities effectively address issues such as reduced endurance and non-functional batteries in winter and high-altitude low-temperature ...



## Degradation behavior of 21700 cylindrical lithium

Degradation behavior of 21700 cylindrical lithium-ion battery cells during overdischarge cycling at low temperatures November 2023 ...





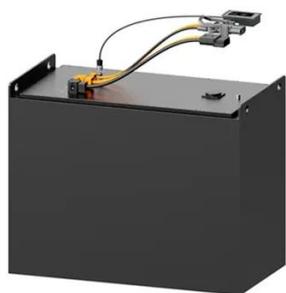
## [18650 vs 21700: Which Battery Offers Better Thermal Management?](#)

Compare thermal management in 18650 and 21700 batteries. Discover which cell type provides superior heat dissipation and performance in high-drain applications.



## [Low Temperature 21700 battery MOLI INR21700-P45B 4500mAh ...](#)

China Low Temperature 21700 battery MOLI INR21700-P45B 4500mAh P45B 3.7V Lithium ion, Find details about China Drone Battery Cells from Low Temperature 21700 battery MOLI ...



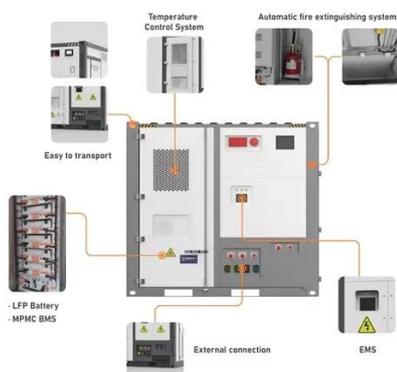
## [Investigation of Convective and Radiative Heat ...](#)

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## [Impact of external heating and state of charge ...](#)

The state of charge (SOC) of the battery likewise adds to this, as cells with higher SOC show more intense venting and higher surface temperatures contrasted with those with ...





## [Unrevealing the effects of low temperature on cycling life of 21700](#)

The low-temperature performance of Li-ion batteries (LIBs) has important impacts on their commercial applications. Besides the metallic lithium deposition, which is regarded as ...



## [Heat generation quantification of high-specific-energy 21700 battery](#)

The results showed that this battery has a higher specific volume heat generation power compared with the pouch-type batteries reported in the literature. This article provides ...

## [Degradation behavior of 21700 cylindrical lithium-ion battery cells](#)

This study unveils the thermo-electrochemical behavior of overdischarged 21700 cylindrical LIB cells at -20 °C and 25 °C.



## [Ultra-Low Temp Lithium-Ion 7.2V 9Ah 21700 ...](#)

Power critical scientific instruments, data loggers, and sensors in extreme cold (-40°C). Ideal for meteorological stations, ice core sampling tools, ...



## [21700 Lithium-ion Battery Manufacturer & Supplier](#)

If you require batteries for a high-temperature environment, Sunpower lithium ion 21700 battery will be your best choice. Featuring superior anti-swelling performance and stability, the 21700 ...



## [Far East Battery's 21700-6000mAh High-Capacity Cell Breaks ...](#)

Its ultra-wide temperature range capabilities effectively address issues such as reduced endurance and non-functional batteries in winter and high-altitude low-temperature ...



## [Samsung 40T 21700 4000mAh 10C Battery \(SDI ...](#)

Samsung INR21700-40T >100K in stock, fresh date code, price has come down, contact us for a special offer. Fast shipping by sea or air with SDS ...



## [Degradation behavior of 21700 cylindrical lithium-ion battery cells](#)

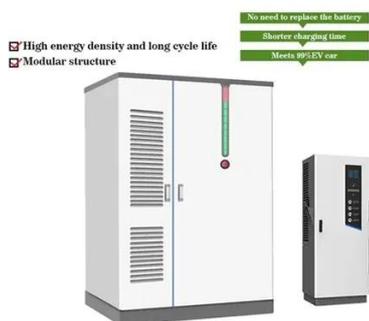
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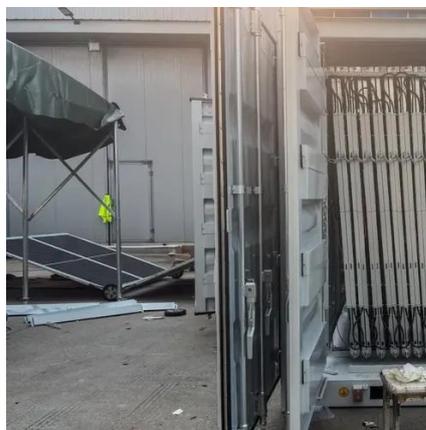


## Ultra-Low Temp Lithium-Ion 7.2V 9Ah 21700 Battery Pack

Power critical scientific instruments, data loggers, and sensors in extreme cold (-40°C). Ideal for meteorological stations, ice core sampling tools, and remote communication devices requiring ...

## Glida 21700-12V-4Ah low temperature lithium battery

Using brand new A-grade low-temperature battery cells, it has the highest energy density and stability on the market. Adopt BMS software management chip, accurate data transmission, ...



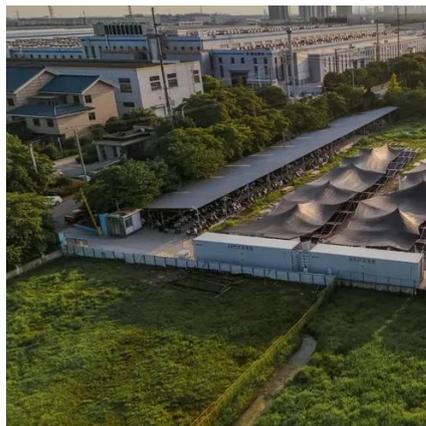
## LiitoKala LT42A 21700 4200mAh Low Temperature Battery , LiitoGo

LiitoKala 21700 4200mAh 3.7V low-temperature Li-ion battery with 45A high-discharge rate. Designed for cold climates, flashlights, e-bikes, and power tools.



## INR21700 M50LT Li-ion Cell

Competitive Edge VS Competing 21700 Cells  
Energy Density: 15% higher than industry average, reducing pack size by 25% Low-Temperature ...



### DETAILS AND PACKAGING



- 1 USER MANUAL PDF
- 2 RJ45 Cable For RS485/CAN
- 3 Battery in Parallel Cables
- 4 RJ45 TO USB Monitor Cable
- 5 MB Terminal\*4

## Understanding the 21700 Battery and Its Specifications

Long-term research in high-performance electrode materials, explosion-proof batteries, and low-temperature batteries, with a solid scientific research background and rich ...

## EVE INR21700 50PL ,100% Original A GRADE

EVE INR21700-50PL lithium-ion cell, OEM-certified, delivers 5000mAh capacity and 120A continuous discharge, Features ...





## Contact Us

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For inquiries, pricing, or partnerships:

<https://iceeng.co.za>

Phone: +27 11 568 9402

Email: [info@iceeng.co.za](mailto:info@iceeng.co.za)

Scan QR code for WhatsApp.

