+357 96 030922
info@marketpublishers.com

Global Lithium-ion Energy Storage Battery Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G803C3CC685BEN.html
Date: May 2026
Pages: 121
Price: US$ 4,480.00 (Single User License)
ID: G803C3CC685BEN

Abstracts

The global Lithium-ion Energy Storage Battery market size is expected to reach $ 126135 million by 2032, rising at a market growth of 15.7% CAGR during the forecast period (2026-2032).

Lithium-ion energy storage batteries are rechargeable batteries designed specifically for power storage applications, in which lithium ions shuttle between the cathode and anode materials during charging and discharging. These products are typically further assembled from cells into modules, packs, or battery clusters, and are integrated with a battery management system to enable capacity management, thermal management, and safety control. They are mainly used in utility-side, grid-side, and behind-the-meter energy storage systems for applications such as peak shaving, renewable energy integration, backup power, and frequency regulation and voltage support. Compared with power batteries for electric vehicles, lithium-ion energy storage batteries place greater emphasis on cycle life, safety, system stability, and total lifecycle cost. In terms of chemistry, lithium iron phosphate is the dominant technology, although some ternary and other lithium-ion chemistries are also used. In 2025, global lithium-ion energy storage battery output reached 612.39 GWh, with an average selling price of 65.6 USD/kWh.

Lithium-ion energy storage batteries are rechargeable batteries designed for power storage applications, in which lithium ions shuttle between the cathode and anode materials during charging and discharging. These products are typically assembled from cells into modules, packs, or battery clusters and are integrated with battery management systems, thermal management units, and safety control components, forming the core energy storage carrier within an energy storage system. They occupy a central midstream position in the new energy storage value chain. Upstream segments

+357 96 030922
info@marketpublishers.com

include cathode materials, anode materials, separators, electrolytes, copper foil, aluminum foil, structural components, BMS, and manufacturing equipment, while downstream they connect to battery system integrators, PCS suppliers, EPC contractors, project owners, and grid operators. Their major applications include utility-side storage, grid-side storage, commercial and industrial storage, residential storage, telecom backup power, and data center storage. Compared with EV batteries, lithium-ion energy storage batteries place less emphasis on short-duration peak power output than certain automotive scenarios, but they demand higher performance in cycle life, safety, consistency, system stability, and levelized lifecycle cost. As a result, the industry is fundamentally an advanced electrochemical sector that combines technology, manufacturing, and engineering applications. In terms of product structure, lithium iron phosphate remains the dominant chemistry for lithium-ion energy storage batteries and has become the mainstream technology across utility-scale storage, commercial and industrial storage, and residential storage. Its leading position is mainly driven by stronger overall advantages in safety, cycle life, cost control, and supply chain maturity. Ternary chemistries still retain a presence in selected niche applications that require higher energy density, better low-temperature performance, or better space utilization, but their overall share remains limited. By application, the industry mainly serves utility-scale storage, grid-side storage, commercial and industrial storage, residential storage, telecom backup, and data center storage. Utility-scale projects place the strongest emphasis on large capacity, long service life, and low cost, while residential and distributed storage applications pay more attention to certification, volumetric efficiency, installation convenience, and brand compatibility. In terms of system form, the industry is evolving from traditional modular solutions toward higher integration, longer duration, and greater standardization, with battery clusters, cabinet-based products, and containerized storage units becoming the mainstream delivery formats. From the manufacturing perspective, the lithium-ion energy storage battery industry has strong scale-driven production characteristics. Its core processes are broadly similar to those of power batteries and mainly include slurry mixing, coating, calendering, slitting, winding or stacking, cell assembly, electrolyte filling, formation, grading, and subsequent module and pack integration. However, storage-oriented products require more specialized capabilities in formulation design, long-cycle reliability, thermal runaway protection, grouping consistency, and system-level adaptation. In recent years, manufacturing platforms have continued to upgrade toward larger scale, higher automation, and better yield performance. At the cell level, the industry has already established single-line platforms measured in several GWh, while module and pack manufacturing is also moving toward more standardized, flexible, and higher-throughput assembly capabilities. Overall, leading companies are relying on gigafactory deployment, automated production upgrades, and platform standardization

+357 96 030922
info@marketpublishers.com

to dilute unit manufacturing costs while improving delivery efficiency and quality consistency. In terms of cost and profitability, material costs remain the largest component of lithium-ion energy storage battery costs, with cathode materials, anode materials, separators, electrolytes, copper foil, aluminum foil, and structural parts accounting for a high proportion. In addition, BMS, thermal management systems, electrical components, and manufacturing expenses are also important cost items. In recent years, with falling upstream material prices, ongoing capacity expansion, and continuous optimization of system integration solutions, energy storage battery prices have entered a downward cycle. Industry competition has gradually shifted from whether capacity exists to a broader competition centered on cost control, yield management, customer structure, and cash flow strength. In profitability terms, leading companies, supported by scale advantages, supply chain bargaining power, technology platforms, and overseas customer exposure, are generally able to maintain stronger earnings resilience. At the industry-wide level, average gross margin is more appropriately understood as being in the 10 percent to 20 percent range, while mid-tier and smaller players are more heavily affected by aggressive pricing and utilization fluctuations, resulting in widening profitability divergence. From the perspective of competitive landscape and future trends, the lithium-ion energy storage battery industry has gradually moved from a phase of rapid capacity expansion into a stage of rising concentration. Leading players continue to expand market share by leveraging capital strength, technology accumulation, quality systems, certification capabilities, and global delivery capacity, while second-tier companies rely more on niche scenarios, regional customers, and differentiated products for growth. Looking ahead, the industry is expected to develop along five main directions. First, large-capacity batteries and highly integrated systems will continue to evolve in order to reduce system-level integration costs. Second, long cycle life, higher safety, wider temperature adaptability, and longer-duration storage performance will keep improving to serve broader grid and commercial applications. Third, overseas localized manufacturing and certification systems will accelerate in response to trade barriers and regional delivery needs. Fourth, the business model will increasingly extend from standalone battery sales to system coordination, scenario-based adaptation, and full lifecycle service. Fifth, lithium-ion technology will remain the dominant route, although it will also face incremental competition from emerging chemistries such as sodium-ion in selected storage applications. Overall, the industry remains in a growth phase, but the core basis of competition will increasingly shift from pure expansion capability toward integrated manufacturing strength, customer stickiness, quality control, and global operating capability.

This report studies the global Lithium-ion Energy Storage Battery production, demand,

+357 96 030922
info@marketpublishers.com

key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Lithium-ion Energy Storage Battery and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Lithium-ion Energy Storage Battery that contribute to its increasing demand across many markets.

Highlights and key features of the study
Global Lithium-ion Energy Storage Battery total production and demand, 2021-2032, (KWh)
Global Lithium-ion Energy Storage Battery total production value, 2021-2032, (USD Million)
Global Lithium-ion Energy Storage Battery production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (KWh), (based on production site)
Global Lithium-ion Energy Storage Battery consumption by region & country, CAGR, 2021-2032 & (KWh)
U.S. VS China: Lithium-ion Energy Storage Battery domestic production, consumption, key domestic manufacturers and share
Global Lithium-ion Energy Storage Battery production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (KWh)
Global Lithium-ion Energy Storage Battery production by Type, production, value, CAGR, 2021-2032, (USD Million) & (KWh)
Global Lithium-ion Energy Storage Battery production by Application, production, value, CAGR, 2021-2032, (USD Million) & (KWh)

This report profiles key players in the global Lithium-ion Energy Storage Battery market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Contemporary Amperex Technology Co., Limited, HiTHIUM, EVE Energy Co., Ltd., BYD Company Limited, CALB Group Co., Ltd., REPT BATTERO Energy Co., Ltd., Gotion High-tech Co., Ltd., Envision AESC, Guangzhou Great Power Energy & Technology Co., Ltd., Sunwoda Energy Technology Co., Ltd., etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices

+357 96 030922
info@marketpublishers.com

used in analyzing the World Lithium-ion Energy Storage Battery market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (KWh) and average price (US$/KWh) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Lithium-ion Energy Storage Battery Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Lithium-ion Energy Storage Battery Market, Segmentation by Type:

Lithium Iron Phosphate Batteries

Ternary Lithium Batteries

Others

Global Lithium-ion Energy Storage Battery Market, Segmentation by Cell Form:

+357 96 030922
info@marketpublishers.com

Square Battery Cell

Cylindrical Battery Cell

Soft-pack Battery Cell

Global Lithium-ion Energy Storage Battery Market, Segmentation by Rated Capacity:

Below 100Ah

100?200Ah

200?300Ah

Above 300Ah

Global Lithium-ion Energy Storage Battery Market, Segmentation by Application:

Residential Energy Storage Cell

Commercial and Industrial Energy Storage Cell

Utility-scale Energy Storage Cell

Telecom Backup Energy Storage Cell

UPS and Data Center Energy Storage Cell

Other Energy Storage Cell

Companies Profiled:

Contemporary Amperex Technology Co., Limited

HiTHIUM

+357 96 030922
info@marketpublishers.com

EVE Energy Co., Ltd.

BYD Company Limited

CALB Group Co., Ltd.

REPT BATTERO Energy Co., Ltd.

Gotion High-tech Co., Ltd.

Envision AESC

Guangzhou Great Power Energy & Technology Co., Ltd.

Sunwoda Energy Technology Co., Ltd.

Narada Power Source Co., Ltd.

Ganfeng LiEnergy Technology Co., Ltd.

Samsung SDI

LG Energy Solution

Key Questions Answered:

1. How big is the global Lithium-ion Energy Storage Battery market?
2. What is the demand of the global Lithium-ion Energy Storage Battery market?
3. What is the year over year growth of the global Lithium-ion Energy Storage Battery market?
4. What is the production and production value of the global Lithium-ion Energy Storage Battery market?
5. Who are the key producers in the global Lithium-ion Energy Storage Battery market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

4 UNITED STATES VS CHINA VS REST OF THE WORLD

+357 96 030922
info@marketpublishers.com

5 MARKET ANALYSIS BY TYPE

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

9 COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

12 APPENDIX

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

Figure 71. Research Process and Data Source

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Lithium-ion Energy Storage Battery Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G803C3CC685BEN.html

Price: US$ 4,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G803C3CC685BEN.html