

Global Solid State Batteries Market 2025 by Company, Regions, Type and Application, Forecast to 2031

<https://marketpublishers.com/r/G99DF98D79DEN.html>

Date: June 2025

Pages: 139

Price: US\$ 3,480.00 (Single User License)

ID: G99DF98D79DEN

Abstracts

According to our latest research, the global Solid State Batteries market size will reach USD 777 million in 2031, growing at a CAGR of 28.1% over the analysis period.

Chemical energy storage, including lead acid batteries, nickel system batteries, and lithium ion batteries (LiBs), is considered to be the most promising energy storage technology for industrialization. Among these, LiBs have many advantages such as light weight, high energy density, high power density, and long life, and they are overwhelmingly preferred by designers for use in portable electronic devices such as cell phones and laptops. However, overcharging or short-circuiting can lead to high temperature and result in fire or explosion due to the presence of flammable organic electrolytes. Fires and explosions of LiBs have been reported throughout the world. The developments of electric vehicles (EVs) and large-scale energy storage devices for new kinds of power stations greatly expand the market for LiBs, meanwhile, stricter safety requirements apply to LiBs. Since large numbers of LiBs are packed together in EVs or power stations, fire or explosion in an LiB could be disastrous. Safety has become the main obstacle for the wide application of LiBs. To meet this issue, All-Solid-State Battery have entered the field.

A solid state battery is composed mainly of cathode, anode, and solid electrolyte, as developed during the latter half of the 20th century. All-Solid-State Battery have a simpler structure than the traditional LiBs, and the simplified structure with a solid electrolyte enables higher energy density. Solid electrolytes not only conduct Li⁺ ions but also serve as the separator, as shown in Figure below. In All-Solid-State Battery, no organic liquid electrolyte, electrolyte salt, separator, or binder is required, which dramatically simplifies the assembly process. The operational principle of All-Solid-State Battery is no different from the traditional LiBs. In the charge process, lithium ions

deintercalate from the cathode material and transport to the anode through the electrolyte, while electrons drift to the anode by the external circuit. Lithium ions combine with electrons to form more complete lithium atoms. The discharge process is just the reverse.

The global Solid State Batteries key players are mainly located in US, Europe, Japan, South Korea and China, include the BMW, Hyundai, Dyson, Apple, CATL, Bollor?, Toyota and Panasonic, etc.

The Solid State Batteries market report provides a detailed analysis of global market size, regional and country-level market size, segmentation market growth, market share, competitive Landscape, sales analysis, impact of domestic and global market players, value chain optimization, trade regulations, recent developments, opportunities analysis, strategic market growth analysis, product launches, area marketplace expanding, and technological innovations.

Market segmentation

Solid State Batteries market is split by Type and by Application. For the period 2025-2031, the growth among segments provide accurate calculations and forecasts for revenue by Type and by Application. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type, covers

Polymer-Based Solid State Batteries

Solid State Batteries with Inorganic Solid Electrolytes

Market segment by Application, can be divided into

Consumer Electronics

Electric Vehicle

Aerospace

Others

Market segment by players, this report covers

BMW

Hyundai

Dyson

Apple

CATL

Bollor?

Toyota

Panasonic

Jiawei

Bosch

Quantum Scape

Ilika

Excellatron Solid State

Cymbet

Solid Power

Mitsui Kinzoku

Samsung

ProLogium

Front Edge Technology

Market segment by regions, regional analysis covers

North America

Europe

Asia-Pacific

South America

Middle East & Africa

Contents

1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of Solid State Batteries
- 1.2 Classification of Solid State Batteries by Type
 - 1.2.1 Overview: Global Solid State Batteries Market Size by Type: 2025 Versus 2031
 - 1.2.2 Global Solid State Batteries Revenue Market Share by Type in 2031
 - 1.2.3 Polymer-Based Solid State Batteries
 - 1.2.4 Solid State Batteries with Inorganic Solid Electrolytes
- 1.3 Global Solid State Batteries Market by Application
 - 1.3.1 Overview: Global Solid State Batteries Market Size by Application: 2025 Versus 2031
 - 1.3.2 Consumer Electronics
 - 1.3.3 Electric Vehicle
 - 1.3.4 Aerospace
 - 1.3.5 Others
- 1.4 Global Solid State Batteries Market Size & Forecast
- 1.5 Market Drivers, Restraints and Trends
 - 1.5.1 Solid State Batteries Market Drivers
 - 1.5.2 Solid State Batteries Market Restraints
 - 1.5.3 Solid State Batteries Trends Analysis

2 COMPANY PROFILES

- 2.1 BMW
 - 2.1.1 BMW Details
 - 2.1.2 BMW Major Business
 - 2.1.3 BMW Solid State Batteries Product and Solutions
 - 2.1.4 BMW Recent Developments and Future Plans
- 2.2 Hyundai
 - 2.2.1 Hyundai Details
 - 2.2.2 Hyundai Major Business
 - 2.2.3 Hyundai Solid State Batteries Product and Solutions
 - 2.2.4 Hyundai Recent Developments and Future Plans
- 2.3 Dyson
 - 2.3.1 Dyson Details
 - 2.3.2 Dyson Major Business
 - 2.3.3 Dyson Solid State Batteries Product and Solutions

2.3.4 Dyson Recent Developments and Future Plans

2.4 Apple

2.4.1 Apple Details

2.4.2 Apple Major Business

2.4.3 Apple Solid State Batteries Product and Solutions

2.4.4 Apple Recent Developments and Future Plans

2.5 CATL

2.5.1 CATL Details

2.5.2 CATL Major Business

2.5.3 CATL Solid State Batteries Product and Solutions

2.5.4 CATL Recent Developments and Future Plans

2.6 Bollor?

2.6.1 Bollor? Details

2.6.2 Bollor? Major Business

2.6.3 Bollor? Solid State Batteries Product and Solutions

2.6.4 Bollor? Recent Developments and Future Plans

2.7 Toyota

2.7.1 Toyota Details

2.7.2 Toyota Major Business

2.7.3 Toyota Solid State Batteries Product and Solutions

2.7.4 Toyota Recent Developments and Future Plans

2.8 Panasonic

2.8.1 Panasonic Details

2.8.2 Panasonic Major Business

2.8.3 Panasonic Solid State Batteries Product and Solutions

2.8.4 Panasonic Recent Developments and Future Plans

2.9 Jiawei

2.9.1 Jiawei Details

2.9.2 Jiawei Major Business

2.9.3 Jiawei Solid State Batteries Product and Solutions

2.9.4 Jiawei Recent Developments and Future Plans

2.10 Bosch

2.10.1 Bosch Details

2.10.2 Bosch Major Business

2.10.3 Bosch Solid State Batteries Product and Solutions

2.10.4 Bosch Recent Developments and Future Plans

2.11 Quantum Scape

2.11.1 Quantum Scape Details

2.11.2 Quantum Scape Major Business

- 2.11.3 Quantum Scape Solid State Batteries Product and Solutions
- 2.11.4 Quantum Scape Recent Developments and Future Plans
- 2.12 Ilika
 - 2.12.1 Ilika Details
 - 2.12.2 Ilika Major Business
 - 2.12.3 Ilika Solid State Batteries Product and Solutions
 - 2.12.4 Ilika Recent Developments and Future Plans
- 2.13 Excellatron Solid State
 - 2.13.1 Excellatron Solid State Details
 - 2.13.2 Excellatron Solid State Major Business
 - 2.13.3 Excellatron Solid State Solid State Batteries Product and Solutions
 - 2.13.4 Excellatron Solid State Recent Developments and Future Plans
- 2.14 Cymbet
 - 2.14.1 Cymbet Details
 - 2.14.2 Cymbet Major Business
 - 2.14.3 Cymbet Solid State Batteries Product and Solutions
 - 2.14.4 Cymbet Recent Developments and Future Plans
- 2.15 Solid Power
 - 2.15.1 Solid Power Details
 - 2.15.2 Solid Power Major Business
 - 2.15.3 Solid Power Solid State Batteries Product and Solutions
 - 2.15.4 Solid Power Recent Developments and Future Plans
- 2.16 Mitsui Kinzoku
 - 2.16.1 Mitsui Kinzoku Details
 - 2.16.2 Mitsui Kinzoku Major Business
 - 2.16.3 Mitsui Kinzoku Solid State Batteries Product and Solutions
 - 2.16.4 Mitsui Kinzoku Recent Developments and Future Plans
- 2.17 Samsung
 - 2.17.1 Samsung Details
 - 2.17.2 Samsung Major Business
 - 2.17.3 Samsung Solid State Batteries Product and Solutions
 - 2.17.4 Samsung Recent Developments and Future Plans
- 2.18 ProLogium
 - 2.18.1 ProLogium Details
 - 2.18.2 ProLogium Major Business
 - 2.18.3 ProLogium Solid State Batteries Product and Solutions
 - 2.18.4 ProLogium Recent Developments and Future Plans
- 2.19 Front Edge Technology
 - 2.19.1 Front Edge Technology Details

- 2.19.2 Front Edge Technology Major Business
- 2.19.3 Front Edge Technology Solid State Batteries Product and Solutions
- 2.19.4 Front Edge Technology Recent Developments and Future Plans

3 MARKET COMPETITION, BY PLAYERS

- 3.1 Global Solid State Batteries Revenue and Share by Players (2025 & 2031)
- 3.2 Solid State Batteries Players Head Office, Products and Services Provided
- 3.3 Solid State Batteries Mergers & Acquisitions
- 3.4 Solid State Batteries New Entrants and Expansion Plans

4 GLOBAL SOLID STATE BATTERIES FORECAST BY REGION

- 4.1 Global Solid State Batteries Market Size by Region: 2025 VS 2031
- 4.2 Global Solid State Batteries Market Size by Region, (2025-2031)
- 4.3 North America
 - 4.3.1 Key Companies of Solid State Batteries in North America
 - 4.3.2 Current Situation and Forecast of Solid State Batteries in North America
 - 4.3.3 North America Solid State Batteries Market Size and Prospect (2025-2031)
- 4.4 Europe
 - 4.4.1 Key Companies of Solid State Batteries in Europe
 - 4.4.2 Current Situation and Forecast of Solid State Batteries in Europe
 - 4.4.3 Europe Solid State Batteries Market Size and Prospect (2025-2031)
- 4.5 Asia-Pacific
 - 4.5.1 Key Companies of Solid State Batteries in Asia-Pacific
 - 4.5.2 Current Situation and Forecast of Solid State Batteries in Asia-Pacific
 - 4.5.3 Asia-Pacific Solid State Batteries Market Size and Prospect (2025-2031)
 - 4.5.4 China
 - 4.5.5 Japan
 - 4.5.6 South Korea
- 4.6 South America
 - 4.6.1 Key Companies of Solid State Batteries in South America
 - 4.6.2 Current Situation and Forecast of Solid State Batteries in South America
 - 4.6.3 South America Solid State Batteries Market Size and Prospect (2025-2031)
- 4.7 Middle East & Africa
 - 4.7.1 Key Companies of Solid State Batteries in Middle East & Africa
 - 4.7.2 Current Situation and Forecast of Solid State Batteries in Middle East & Africa
 - 4.7.3 Middle East & Africa Solid State Batteries Market Size and Prospect (2025-2031)

5 MARKET SIZE SEGMENT BY TYPE

5.1 Global Solid State Batteries Market Forecast by Type (2025-2031)

5.2 Global Solid State Batteries Market Share Forecast by Type (2025-2031)

6 MARKET SIZE SEGMENT BY APPLICATION

6.1 Global Solid State Batteries Market Forecast by Application (2025-2031)

6.2 Global Solid State Batteries Market Share Forecast by Application (2025-2031)

7 RESEARCH FINDINGS AND CONCLUSION

8 APPENDIX

8.1 Methodology

8.2 Research Process and Data Source

8.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. Global Solid State Batteries Revenue by Type, (USD Million) 2025 VS 2031

Table 2. Global Solid State Batteries Revenue by Application, (USD Million), 2025 VS 2031

Table 3. BMW Corporate Information, Head Office, and Major Competitors

Table 4. BMW Major Business

Table 5. BMW Solid State Batteries Product and Solutions

Table 6. Hyundai Corporate Information, Head Office, and Major Competitors

Table 7. Hyundai Major Business

Table 8. Hyundai Solid State Batteries Product and Solutions

Table 9. Dyson Corporate Information, Head Office, and Major Competitors

Table 10. Dyson Major Business

Table 11. Dyson Solid State Batteries Product and Solutions

Table 12. Apple Corporate Information, Head Office, and Major Competitors

Table 13. Apple Major Business

Table 14. Apple Solid State Batteries Product and Solutions

Table 15. CATL Corporate Information, Head Office, and Major Competitors

Table 16. CATL Major Business

Table 17. CATL Solid State Batteries Product and Solutions

Table 18. Bollor? Corporate Information, Head Office, and Major Competitors

Table 19. Bollor? Major Business

Table 20. Bollor? Solid State Batteries Product and Solutions

Table 21. Toyota Corporate Information, Head Office, and Major Competitors

Table 22. Toyota Major Business

Table 23. Toyota Solid State Batteries Product and Solutions

Table 24. Panasonic Corporate Information, Head Office, and Major Competitors

Table 25. Panasonic Major Business

Table 26. Panasonic Solid State Batteries Product and Solutions

Table 27. Jiawei Corporate Information, Head Office, and Major Competitors

Table 28. Jiawei Major Business

Table 29. Jiawei Solid State Batteries Product and Solutions

Table 30. Bosch Corporate Information, Head Office, and Major Competitors

Table 31. Bosch Major Business

Table 32. Bosch Solid State Batteries Product and Solutions

Table 33. Quantum Scape Corporate Information, Head Office, and Major Competitors

Table 34. Quantum Scape Major Business

| |
|---|
| Table 35. Quantum Scape Solid State Batteries Product and Solutions |
| Table 36. Ilika Corporate Information, Head Office, and Major Competitors |
| Table 37. Ilika Major Business |
| Table 38. Ilika Solid State Batteries Product and Solutions |
| Table 39. Excellatron Solid State Corporate Information, Head Office, and Major Competitors |
| Table 40. Excellatron Solid State Major Business |
| Table 41. Excellatron Solid State Solid State Batteries Product and Solutions |
| Table 42. Cymbet Corporate Information, Head Office, and Major Competitors |
| Table 43. Cymbet Major Business |
| Table 44. Cymbet Solid State Batteries Product and Solutions |
| Table 45. Solid Power Corporate Information, Head Office, and Major Competitors |
| Table 46. Solid Power Major Business |
| Table 47. Solid Power Solid State Batteries Product and Solutions |
| Table 48. Mitsui Kinzoku Corporate Information, Head Office, and Major Competitors |
| Table 49. Mitsui Kinzoku Major Business |
| Table 50. Mitsui Kinzoku Solid State Batteries Product and Solutions |
| Table 51. Samsung Corporate Information, Head Office, and Major Competitors |
| Table 52. Samsung Major Business |
| Table 53. Samsung Solid State Batteries Product and Solutions |
| Table 54. ProLogium Corporate Information, Head Office, and Major Competitors |
| Table 55. ProLogium Major Business |
| Table 56. ProLogium Solid State Batteries Product and Solutions |
| Table 57. Front Edge Technology Corporate Information, Head Office, and Major Competitors |
| Table 58. Front Edge Technology Major Business |
| Table 59. Front Edge Technology Solid State Batteries Product and Solutions |
| Table 60. Global Solid State Batteries Revenue (USD Million) by Players (2025 & 2031) |
| Table 61. Global Solid State Batteries Revenue Share by Players (2025 & 2031) |
| Table 62. Solid State Batteries Players Head Office, Products and Services Provided |
| Table 63. Solid State Batteries Mergers & Acquisitions in the Past Five Years |
| Table 64. Solid State Batteries New Entrants and Expansion Plans |
| Table 65. Global Market Solid State Batteries Revenue (USD Million) Comparison by Region (2025 VS 2031) |
| Table 66. Global Solid State Batteries Revenue Market Share by Region (2025-2031) |
| Table 67. Key Companies of Solid State Batteries in North America |
| Table 68. Current Situation and Forecast of Solid State Batteries in North America |
| Table 69. Key Companies of Solid State Batteries in Europe |
| Table 70. Current Situation and Forecast of Solid State Batteries in Europe |

| |
|---|
| Table 71. Key Companies of Solid State Batteries in Asia-Pacific |
| Table 72. Current Situation and Forecast of Solid State Batteries in Asia-Pacific |
| Table 73. Key Companies of Solid State Batteries in China |
| Table 74. Key Companies of Solid State Batteries in Japan |
| Table 75. Key Companies of Solid State Batteries in South Korea |
| Table 76. Key Companies of Solid State Batteries in South America |
| Table 77. Current Situation and Forecast of Solid State Batteries in South America |
| Table 78. Key Companies of Solid State Batteries in Middle East & Africa |
| Table 79. Current Situation and Forecast of Solid State Batteries in Middle East & Africa |
| Table 80. Global Solid State Batteries Revenue Forecast by Type (2025-2031) |
| Table 81. Global Solid State Batteries Revenue Forecast by Application (2025-2031) |

List Of Figures

LIST OF FIGURES

- Figure 1. Solid State Batteries Picture
- Figure 2. Global Solid State Batteries Revenue Market Share by Type in 2031
- Figure 3. Polymer-Based Solid State Batteries
- Figure 4. Solid State Batteries with Inorganic Solid Electrolytes
- Figure 5. Solid State Batteries Revenue Market Share by Application in 2031
- Figure 6. Consumer Electronics Picture
- Figure 7. Electric Vehicle Picture
- Figure 8. Aerospace Picture
- Figure 9. Others Picture
- Figure 10. Global Solid State Batteries Market Size, (USD Million): 2025 VS 2031
- Figure 11. Global Solid State Batteries Revenue and Forecast (2025-2031) & (USD Million)
- Figure 12. Solid State Batteries Market Drivers
- Figure 13. Solid State Batteries Market Restraints
- Figure 14. Solid State Batteries Market Trends
- Figure 15. BMW Recent Developments and Future Plans
- Figure 16. Hyundai Recent Developments and Future Plans
- Figure 17. Dyson Recent Developments and Future Plans
- Figure 18. Apple Recent Developments and Future Plans
- Figure 19. CATL Recent Developments and Future Plans
- Figure 20. Bollor? Recent Developments and Future Plans
- Figure 21. Toyota Recent Developments and Future Plans
- Figure 22. Panasonic Recent Developments and Future Plans
- Figure 23. Jiawei Recent Developments and Future Plans
- Figure 24. Bosch Recent Developments and Future Plans
- Figure 25. Quantum Scape Recent Developments and Future Plans
- Figure 26. Ilika Recent Developments and Future Plans
- Figure 27. Excellatron Solid State Recent Developments and Future Plans
- Figure 28. Cymbet Recent Developments and Future Plans
- Figure 29. Solid Power Recent Developments and Future Plans
- Figure 30. Mitsui Kinzoku Recent Developments and Future Plans
- Figure 31. Samsung Recent Developments and Future Plans
- Figure 32. ProLogium Recent Developments and Future Plans
- Figure 33. Front Edge Technology Recent Developments and Future Plans
- Figure 34. Global Solid State Batteries Revenue Market Share by Region (2025-2031)

Figure 35. Global Solid State Batteries Revenue Market Share by Region in 2031

Figure 36. North America Solid State Batteries Revenue (USD Million) and Growth Rate (2025-2031)

Figure 37. Europe Solid State Batteries Revenue (USD Million) and Growth Rate (2025-2031)

Figure 38. Asia-Pacific Solid State Batteries Revenue (USD Million) and Growth Rate (2025-2031)

Figure 39. South America Solid State Batteries Revenue (USD Million) and Growth Rate (2025-2031)

Figure 40. Middle East & Africa Solid State Batteries Revenue (USD Million) and Growth Rate (2025-2031)

Figure 41. Global Solid State Batteries Market Share Forecast by Type (2025-2031)

Figure 42. Global Solid State Batteries Market Share Forecast by Application (2025-2031)

Figure 43. Methodology

Figure 44. Research Process and Data Source

I would like to order

Product name: Global Solid State Batteries Market 2025 by Company, Regions, Type and Application, Forecast to 2031

Product link: <https://marketpublishers.com/r/G99DF98D79DEN.html>

Price: US\$ 3,480.00 (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/G99DF98D79DEN.html>