

# Printed Batteries Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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# **Abstracts**

The global printed batteries market size reached US\$ 132.3 Million in 2021. Looking forward, IMARC Group expects the market to reach US\$ 1,338.7 Million by 2027, exhibiting a growth rate (CAGR) of 46.51% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic. These insights are included in the report as a major market contributor.

Printed electronics is an umbrella term used for electronic devices created by printing on a variety of substrates. Printed batteries are one of the critical parts of printed electronics and use various active materials from solution-based inks. These inks are deposited under a substrate using suitable printing techniques, such as stencil, screen, dispenser and spray printing, and dip or blade coating. Nowadays, a wide variety of printed batteries are available in the market, such as disposable and rechargeable batteries. Some of the commonly used anode and cathode materials utilized in printed batteries include Lithium titanate (LTO) and lithium iron phosphate (LFP).

Printed batteries serve as an excellent alternative to conventional batteries due to their cost-effectiveness, compact structure, flexibility and portability. On account of these properties, they are used in several applications, such as radio-frequency sensing, cosmetic and medicinal patches, greeting cards sensor, data logging systems, interactive packaging and other consumer electronics products. The associated advantages, along with their increasing and diversified applications, represent the primary factors driving the market growth. Besides this, printed batteries are sustainable and environment-friendly, which can dramatically reduce material waste and enable faster production due to the less complicated fabrication procedures. With the



advancements in the Internet of Things (IoT) and wireless sensor technologies, there has been rapid adoption of these batteries, which is acting as another major growth-inducing factor. Moreover, the leading electronics companies are developing printed cells using 3D printing technologies that are compatible with smart devices and exhibit minimal volumetric expansion, high rate capability, stability and security. This is expected to drive the market in the coming years.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global printed batteries market report, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on voltage range, product type and application.

Breakup by Voltage Range:

Below 1.5 V Between 1.5 V to 3 V Above 3V

Breakup by Product Type:

Rechargeable Non-Rechargeable

Breakup by Application:

Consumer Electronics Energy Harvesting Medical Devices Smart Packaging Smart Cards Wearable Technology Others

Breakup by Region:

North America United States Canada

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Asia Pacific China Japan India South Korea Australia Indonesia Others Europe Germany France United Kingdom Italy Spain Russia Others Latin America Brazil Mexico Others Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined with some of the key players being Blue Spark Technologies Inc., BrightVolt Solid State Batteries, Cymbet Corporation, Enfucell Oy, FLEXEL LLC, Imprint Energy Inc., NEC Corporation, Planar Energy Devices Inc., Samsung SDI Co. Ltd. and Xymox Technologies Inc.

Key Questions Answered in This Report:

How has the global printed batteries market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global printed batteries market? What are the key regional markets?

What is the breakup of the market based on the voltage range?

What is the breakup of the market based on the product type?

What is the breakup of the market based on the application?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global printed batteries market and who are the key



players? What is the degree of competition in the industry?



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