Thin-Film Battery Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

Market Report | 2023-06-14 | 148 pages | IMARC Group

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Report description:

Market Overview 2023-2028:

The global thin-film battery market size reached US$ 570.4 Million in 2022. Looking forward, IMARC Group expects the market to reach US$ 2,124.3 Million by 2028, exhibiting a growth rate (CAGR) of 26.71% during 2023-2028.

Thin-film batteries are solid-state batteries which implies that they use both solid electrodes and a solid electrolyte. These batteries are very distinctive when compared to other batteries as they are just a few hundred nanometers thick. Thin-film batteries contains a cathode and an anode along with an electrolyte and separator between the two just like any other conventional battery. They are thin in comparison to other batteries that are available in the market. The electrode material used in these batteries is layered which implies that there is no need to add layers during the construction of the battery. The electrodes improve the overall performance of the battery and also increases its ability to function in different ranges which make thin-film batteries highly compatible to be used in different applications. Additionally, these batteries come with a great number of benefits, like they leave smaller footprints, are lower in cost, have high energy density, and are light in weight. The flat shape of thin-film batteries makes them more compatible with emerging technologies.

The thin-film battery market is exhibiting strong growth catalyzed by a rapid rise in the use of smartphones, tablets, and other electronic devices. With consumers being more technology-friendly, the demand for such electronic devices is witnessing robust growth. The steady increase in the usage of devices like smartwatch and fitness bands is making the consumption of thin-film batteries even more appropriate. Additionally, thin-film batteries are flat-shaped and are perfect to be incorporated in smaller and thinner devices which further enhances their demand in the market. Being reliable, inexpensive, and smaller in size these batteries can be easily incorporated in our day to day wearable electronic devices. Thin-film batteries have a great battery backup, as a result of which, they are appropriate for devices with low-power consumption.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global thin-film battery market report, along with forecasts at the global and regional level from 2023-2028. Our report has categorized the market based on technology, battery type, voltage type and application.

Breakup by Technology:

Thin-Film Lithium
Thin-Film Lithium Polymer
Zinc-Based Thin-Film
Others

Based on the technology, the market has been segmented as thin-film lithium, thin-film lithium polymer, zinc-based thin-film and others. Thin-film lithium batteries currently represent the biggest segment.

Breakup by Battery Type:

Rechargeable
Disposable

Based on the battery type, the market has been segmented as disposable and rechargeable. Thin-film rechargeable batteries currently represent the largest segment.

Breakup by Voltage Type:

Below 1.5V
1.5V to 3V
Above 3V

Based on the voltage, the market has been segmented as - below 1.5V, 1.5V to 3V and above 3V.

Breakup by Application:

Smart Cards and RFID
Medical Applications
Smart Wearables
Wireless Sensor Network Systems
Portable Electronics
Others

Based on the application, the market has been segmented as smart cards and RFID, medical applications, smart wearables, WSNs and portable electronics. The smart wearables segment currently represent the largest application.

Regional Insights:

- North America
- Asia Pacific
- Europe
- Middle East and Africa
- Latin America

Region-wise, the market has been segmented into North America, Asia Pacific, Europe, Middle East and Africa, and Latin America. Amongst these, North America is the biggest market, accounting for the majority of the global market.

Competitive Landscape:

The competitive landscape of the market has also been examined with some of the key players being Blue Spark Technologies, BrightVolt, Enfucell Oy, STMicroelectronics N.V., Cymbet Corporation, Imprint Energy, Ilika PLC, LG Chem, Ltd, Paper Battery Company and Jenax Inc.

This report provides a deep insight into the global thin-film battery market covering all its essential aspects. This ranges from macro overview of the market to micro details of the industry performance, recent trends, key market drivers and challenges, SWOT analysis, Porter's five forces analysis, value chain analysis, etc. This report is a must-read for entrepreneurs, investors, researchers, consultants, business strategists, and all those who have any kind of stake or are planning to foray into the thin-film battery industry in any manner.

Key Questions Answered in This Report:

What was the size of the global thin-film battery market in 2022?
What is the expected growth rate of the global thin-film battery market during 2023-2028?
What has been the impact of COVID-19 on the global thin-film battery market?
What are the key factors driving the global thin-film battery market?
What is the breakup of the global thin-film battery market based on the technology?
What is the breakup of the global thin-film battery market based on the battery type?
What is the breakup of the global thin-film battery market based on the voltage type?
What is the breakup of the global thin-film battery market based on the application?
What are the key regions in the global thin-film battery market?
Who are the key players/companies in the global thin-film battery market?

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