

Flexible Battery Market with COVID-19 Update by Type (Thin-film, Printed), Voltage, Capacity, Rechargeability (Primary Batteries, Secondary Batteries), Application (Medical Devices, Smart Packaging), Region - Global Forecast to 2025

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Abstracts

“Increasing demand for flexible batteries for use in wearables is fueling the growth of the flexible battery market.”

The flexible battery market is projected to grow at a CAGR of 24.7% from 2020 to 2025, reaching USD 296 million by 2025 from USD 98 million in 2020. The applications of wearable electronics are increasing continuously, ranging from consumer electronics and healthcare devices to enterprise and industrial use. There is a growing demand for mobile healthcare devices and wireless healthcare monitoring devices globally. These devices require durable energy sources, thereby creating a significant market potential for thin and flexible lithium batteries. The market for wearable electronics is witnessing an increasing number of new product launches and developments. These devices require high flexibility and lightweight batteries to ensure uninterrupted power supply to them. Moreover, research activities are being carried out globally to invent innovative, flexible batteries for wearable electronics.

The global production of consumer electronics has been declining owing to the COVID-19 outbreak. The prices of consumer electronics could rise in the coming months owing to the partial clampdown of consumer electronics manufacturing units in China. This, in turn, is expected to result in a cut short supply of components used in consumer electronics. Going forward, a number of manufacturers are expected to take into account the supply chain disruptions in China. The impact of supply chain disruptions on manufacturing facilities has been visible from April onwards as a number

of other countries, including the US, India, Germany, and the UK, are also significantly impacted by COVID-19. This is expected to have a negative impact on the growth of the flexible battery market in 2020.

“The primary flexible batteries segment accounted for the largest share of the flexible battery market during the forecast period.”

The single-use flexible batteries, such as printed batteries, are used in products without high power requirements and with a limited lifespan. These batteries are used in smart packaging, smart cards, and medical and cosmetic patches, as they have slower self-discharge time than rechargeable thin-film batteries. The sensors used in applications such as smart packaging and medical and cosmetic patches require disposable single-use power sources. Increasing adoption of these patches is expected to drive the growth of the flexible battery market during the forecast period.

“The above 3V segment of the market is projected to grow at the highest rate from 2020 to 2025.” The above 3V flexible batteries are preferred over other variants since they offer the most energy density with the lightest weight possible. These batteries are popular and have significant demand as they offer high power, have a long life, and offer increased safety. Moreover, they are not composed of toxic materials.

“The flexible battery market in APAC is projected to grow at the highest rate during the forecast period.”

Continuously increasing demand for IoT-enabled devices and portable consumer electronics in countries such as China, Japan, and South Korea is driving the growth of the flexible battery market in APAC. The popularity of the next-generation smart cards is rapidly increasing in APAC, thereby driving the demand for flexible batteries to be integrated with smart cards as power sources. The market for flexible batteries in APAC is expected to grow significantly during the forecast period owing to the increased demand for wearable devices and consumer electronics from key countries of the region. A number of battery startups are developing flexible batteries and integrating them with a number of products. For instance, in 2019, Jenax (South Korea) launched a J.Flex battery, which can be twisted, bent, and folded like paper. It is used in medical devices and consumer electronics.

Moreover, the presence of a number of manufacturers of consumer electronics and wearable devices that include Panasonic Corp. (Japan), Sony Corp. (Japan), Samsung SDI Co. Ltd. (South Korea), LG Electronics Inc. (South Korea), etc. in the region is

driving the growth of the flexible battery market in APAC.

Extensive primary interviews have been conducted with key experts in the flexible battery market to determine and verify the market size of several segments and subsegments. Following is the breakup of the primary participants:

By Company Type: Tier 1 = 25 %, Tier 2 = 40%, and Tier 3 = 35%

By Designation: C-level Executives = 72% and Others = 28%

By Region: North America = 32%, Europe = 30%, APAC = 24%, and RoW = 14%

The report profiles the key players in the flexible battery market and analyzes their market rankings. A few prominent players profiled in this report include Samsung SDI (South Korea), LG Chem (South Korea), Enfucell Oy Ltd. (Finland), Blue Spark Technologies (US), Apple, Inc. (US), Panasonic (Japan), Ultralife Corporation (US), BrightVolt (US), Imprint Energy (US), Energy Diagnostics (UK), and Jenax (South Korea).

Research Coverage:

This research report categorizes the flexible battery market based on type, rechargeability, voltage, capacity, application, and region. The report describes the key drivers, restraints, challenges, and opportunities pertaining to this market, as well as the value chain and market ranking analysis.

Reasons to Buy the Report:

The report is expected to help leaders/new entrants in the flexible battery market in the following ways:

1. The report segments the flexible battery market comprehensively, and provides the market size estimation for all segments and subsegments across different regions.
2. The report helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.
3. The report is expected to help stakeholders understand their competitors in an improved manner and gain insights to improve their position in the flexible battery

market. The competitive landscape section describes the competitor ecosystem.

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