+357 96 030922
info@marketpublishers.com

Aircraft Battery - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

https://marketpublishers.com/r/A2CA0F4277DEEN.html
Date: July 2024
Pages: 120
Price: US$ 4,750.00 (Single User License)
ID: A2CA0F4277DEEN

Abstracts

The Aircraft Battery Market size is estimated at USD 0.78 billion in 2024, and is expected to reach USD 1.09 billion by 2029, growing at a CAGR of 6.91% during the forecast period (2024-2029).

In a modern aircraft, a battery acts as an inevitable part as it is used for various applications on board aircraft, such as starting auxiliary/standby power unit, engine cranking, canopy opening, emergency power, flight control backup, or a combination of the above. The demand for aircraft batteries in the commercial aviation sector is driven by the rising air passenger, which, in turn, drives airlines to procure new aircraft that use different types of aircraft batteries.

In the general aviation sector, the demand for helicopters and business jets to transport medical supplies, cargo, VIPs, and charter operations experienced a significant rise, supporting the growth of the market. In the military aircraft segment, factors such as increasing geopolitical tensions and aircraft modernization programs by various countries to bolster their security are driving the market demand.

The shift toward more electric architecture, including several electrical systems used in aircraft, requires high energy storage capacity and longevity, which further generates opportunities for advancement and innovation in aircraft batteries. However, factors such as the operational risk from lithium-based batteries, government rules and regulations, risk hazards, and the high initial cost of raw aircraft technologies are expected to hinder the aircraft battery market growth.

Despite this challenge, an increase in demand for unmanned vehicles in the civil and commercial sectors for various applications is also driving market growth. UAVs are

also used in the military sectors for surveillance and combat applications. Overall, the growing use of UAVs for military, civil, and commercial applications is expected to accelerate the aircraft battery market growth during the forecast period.

Aircraft Battery Market Trends

The Lithium-ion Battery Segment is Projected to Showcase the Highest Growth During the Forecast Period

Lithium-ion (or Li-ion) batteries are smaller in size, require low maintenance, and are environmentally safer than nickel-cadmium batteries. Thus, the use of lithium-ion batteries is likely to increase at a higher rate compared to other types during the forecast period.

The demand for Li-ion batteries is driven by the rising air passenger traffic, which, in turn, drives the procurement of new aircraft with batteries for various purposes. For instance, in January 2024, IATA announced that in 2023, the global revenue passenger kilometers rose by 36.9% compared to 2022, and the global air traffic was at 94.1% of the pre-pandemic levels.

Global aircraft original equipment manufacturers (OEMs) such as Airbus, Boeing, and others have been increasingly receiving aircraft orders. Currently, lithium-ion batteries are being used in Boeing B787 Dreamliner aircraft and Airbus A350 for starting and as an emergency power source. In 2023, Airbus and Boeing announced that they received orders for 313 B787s and 300 A350s, respectively. This factor is expected to drive the demand for commercial aviation. Commercial aircraft programs and military aircraft like Lockheed Martin F-35 Lightning II aircraft also deploy Li-ion batteries. The F-35 fighter jet utilizes Li-ion batteries for flight control actuation backup power.

Various companies are developing new battery technologies that efficiently power various business jet models. For instance, in October 2023, Airwolf Aerospace acquired supplemental type certificates (STCs) for the installation of its lithium-ion batteries in business jets and turboprops, including Cessna Citation, Embraer Phenom, Cessna Caravan, and Pilatus PC-12 aircraft. Such factors are expected to drive the demand for aircraft batteries during the forecast period.

Asia-Pacific will Witness the Highest Growth During the Forecast Period

Asia-Pacific is expected to experience the highest growth owing to the robust procurement of commercial aircraft from the various airlines due to the increasing region's air passenger traffic, which, in turn, drives the demand for new aircraft. For instance, according to IATA, in 2023, the region’s revenue passenger kilometer Y-o-Y growth was 60.7% compared to 2022. In 2023, IATA also mentioned that the region’s airlines recorded a growth of 126.1% in international traffic compared to 2022, maintaining the strongest Y-o-Y rate among the regions.

To cater to this rising demand, various airlines in China, India, Japan, and South Korea are ordering new narrowbody and widebody aircraft OEMs as a part of fleet expansion and modernization programs. For instance, according to Boeing, Asia-Pacific will receive 8,595 aircraft deliveries during 2022-2041. About 76% of the delivered aircraft are expected to be single-aisle aircraft, and approximately 50% of aircraft will be delivered to airlines in China.

The growth in military spending of the countries in the region due to the ongoing geopolitical tensions between the countries is expected to propel the investment of the armed forces into the procurement of new-generation military aircraft to strengthen their aerial capabilities. For instance, in March 2023, the Indian Defence Ministry approved procuring 70 locally made HTT-40 basic trainer aircraft for USD 388.5 million. HAL India announced that the HTT-40 is powered by a lithium-ion battery developed specifically for military aviation.

The general aviation market is also expected to boost its growth as helicopters and business jets are being procured for various civil and commercial applications. For instance, in January 2024, Adani Group awarded a contract to Pilatus to deliver six PC-24 aircraft. In March 2023, Travira Air awarded a contract to Leonardo to deliver additional AW139 helicopters for offshore applications. Overall, developments such as these are expected to drive the demand for aircraft batteries in the region during the forecast period.

Aircraft Battery Industry Competitive Landscape

The aircraft battery market is fragmented in nature, with several players holding significant shares in the market. Some of the prominent players in the aircraft battery market are Concorde Battery Corporation, GS Yuasa Group, SolarEdge Technologies

+357 96 030922
info@marketpublishers.com

Inc., Teledyne Technologies Incorporated, and Saft Groupe SAS.

Concorde Battery Corporation is one of the major companies that provide aircraft batteries for military aircraft programs like Boeing CH-47 Chinook, Northrop Grumman EA-6B Prowler, Sikorsky CH-53K King Stallion, Boeing F/A-18 Super Hornet, and Bell Boeing V-22 Osprey, among others. Saft Groupe SAS supports major commercial aircraft programs of Airbus and Boeing like ATR 42/72, Airbus A320, Airbus A330, Boeing B737, Boeing B777, and Embraer E-Jet 170/190 series aircraft, along with military and general aviation aircraft, like Falcon 2000, Falcon 900LX, Airbus A400M, and Lockheed Martin F-35, among others.

Owing to the growth of commercial aviation, along with an increase in the procurement of military aircraft, the aircraft battery market is expected to grow rapidly. With the ongoing electrification of aircraft, companies are developing new and advanced battery technologies. The replacement of batteries in aircraft has also increased the demand for batteries from companies like True Blue Power and Kokam.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Aircraft Battery - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

Product link: https://marketpublishers.com/r/A2CA0F4277DEEN.html

Price: US$ 4,750.00 (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/A2CA0F4277DEEN.html