

# Supercapacitor Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028

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# **Abstracts**

The global supercapacitor market size reached US\$ 4.4 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 15.2 Billion by 2028, exhibiting a growth rate (CAGR) of 22.3% during 2023-2028.

A supercapacitor, or ultracapacitor, refers to an electronic device used for storing large amounts of electrical charge. It consists of two metal plates that are coated with porous activated carbon and are immersed in an electrolyte made of positive and negative ions dissolved in a solvent. While it is being charged, ions from the electrolyte accumulate on the surface of each carbon-coated plate, thus storing energy formed between the particles. As compared to the traditionally used batteries, supercapacitors deliver stabilized power, handle more fluctuations and discharge cycles and have wide-ranging operating temperatures. As a result, they are commonly used in smartphones, laptops, electronic devices and automobiles that run on batteries and require rapid charging to function.

# Supercapacitor Market Trends:

Significant growth in the electronics industry, along with the increasing requirement for energy-efficient equipment for solar and wind power systems, is one of the key factors creating a positive impact on the market. Furthermore, widespread product adoption by the automotive industry is providing a boost to the market growth. Supercapacitors are extensively used in automobiles for a smooth charge/discharge cycle used for on/off switching in the vehicle. In line with this, shifting consumer preference for electric and hybrid electric vehicles (HEV) is also favoring the market growth. Additionally, the increasing utilization of supercapacitors by the utility sector is acting as another growth-inducing factor. They are commonly used for generator bridging, ramping and regulation, primary frequency response, and voltage sag mitigation in microgrid



monitoring and stabilization. Other factors, including the growing demand for consumer electronics with high battery requirements, are expected to drive the market further.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global supercapacitor market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on product type, module type, material type and end use industry.

Breakup by Product Type:

Electric Double-Layered Capacitors
Pseudocapacitors
Hybrid Capacitors

Breakup by Module Type:

Less than 25V 25-100V More than 100V

Breakup by Material Type:

Carbon and Metal Oxide Conducting Polymer Composite Materials

Breakup by End Use Industry:

Automotive and Transportation
Consumer Electronics
Power and Energy
Healthcare
Others

Breakup by Region:

North America



**United States** 

Canada

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 AVX Corporation, Cap-XX Limited (Kyocera), Eaton Corporation PLC, Elna Co. Ltd. (Taiyo Yuden), Ioxus Inc. (XS Power Batteries), Kemet Corporation (Yageo Corporation), LS Mtron Ltd., Nippon Chemi-Con Corporation, Panasonic Corporation, Seiko Instruments Inc., Skeleton Technologies GmbH and Tesla Inc.

## Key Questions Answered in This Report

- 1. What was the size of the global supercapacitor market in 2022?
- 2. What is the expected growth rate of the global supercapacitor market during 2023-2028?
- 3. What are the key factors driving the global supercapacitor market?
- 4. What has been the impact of COVID-19 on the global supercapacitor market?
- 5. What is the breakup of the global supercapacitor market based on the product type?
- 6. What is the breakup of the global supercapacitor market based on the module type?



- 7. What is the breakup of the global supercapacitor market based on the material type?
- 8. What is the breakup of the global supercapacitor market based on the end use industry?
- 9. What are the key regions in the global supercapacitor market?
- 10. Who are the key players/companies in the global supercapacitor market?



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