

DC-DC Converter Market Report by Mounting Style (Surface Mount, Through Hole), Input Voltage (5-36V, 36-75V, 75V and Above), Output Voltage (3.3V, 5V, 12V, 15V and Above), Application (Smartphone, Servers PCs, EV Battery, Railway, and Others), and Region 2024-2032

<https://marketpublishers.com/r/DF74F7CEBC29EN.html>

Date: July 2024

Pages: 149

Price: US\$ 3,899.00 (Single User License)

ID: DF74F7CEBC29EN

Abstracts

The global DC-DC converter market size reached US\$ 11.5 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 20.8 Billion by 2032, exhibiting a growth rate (CAGR) of 6.7% during 2024-2032. The growing consumer demand for various electronic devices, rising focus on renewable energy to maintain sustainability and reduce carbon footprint, and increasing popularity of miniaturization of devices are some of the major factors propelling the market.

A DC-DC converter, also known as a voltage regulator, is an electronic device that is used to convert one direct current voltage level into another while maintaining a consistent and stable output voltage. It is designed to efficiently manage power distribution that allows devices and systems to operate with the appropriate voltage levels they require. It is crucial in maintaining the integrity and reliability of electronic equipment. As it aids in ensuring that voltage fluctuations or disparities do not negatively impact the performance of a product, the demand for DC-DC converters is rising across the globe.

At present, the growing demand for energy efficiency and precise voltage control is influencing the market positively. Moreover, the rising adoption of electronic devices that enable a reliable supply of power to sensitive electronic components while preventing potential damage is strengthening the growth of the market. Apart from this, the growing

demand for DC-DC converters, as they assist in minimizing energy wastage, is offering a favorable market outlook. Additionally, the rising development of data centers that require efficient power conversion to support the increased load is offering lucrative growth opportunities to industry investors. Besides this, the increasing utilization of DC-DC converters to provide regulated power to sensors, actuators, and control systems is impelling the growth of the market. In addition, the rising demand for efficient power management and longer battery life of various electronic components is contributing to the growth of the market.

DC-DC Converter Market Trends/Drivers:

Rising consumer demand for electronic devices

The rising adoption of various electronic products, such as smartphones, laptops, personal computers (PCs), and wearables devices among the masses across the globe is bolstering the growth of the market. Additionally, these converters assist in enhancing the functionality and reducing the wastage of these electronic components. Apart from this, they play an essential role in meeting the power requirements of these devices while maintaining portability. In line with this, the rising adoption of numerous electronic devices in the healthcare sector is contributing to the growth of the market.

Furthermore, there is an increase in the demand for compact and energy-efficient DC-DC converters to minimize energy consumption.

Increasing focus on renewable energy to maintain sustainability

The rising focus on renewable energy to maintain sustainability and reduce carbon emissions in the environment is supporting the growth of the market. In line with this, there is an increase in the focus on producing solar and wind energy to provide a cleaner environment across the globe. Consumers are also becoming aware of the harmful impact of pollution and preferring sustainable energy sources for performing daily activities. Moreover, they are increasingly adopting electric vehicles (EVs) as compared to conventional vehicles. DC-DC converters play an essential role in EV charging infrastructure to ensure seamless power conversion between various voltage levels in EV batteries and charging stations. They are also utilized in solar panels to ensure that the energy harvested is efficiently converted and stored in batteries or connected to the grid.

Growing popularity of miniaturization of devices

The increasing popularity of miniaturization of devices among individuals is contributing

to the growth of the market. In line with this, the rising preference for compact and lightweight devices, such as medical equipment, drones, or portable electronic gadgets, is impelling the growth of the market. These converters are designed to offer high power density that enables them to fit within the constrained spaces of modern devices without sacrificing efficiency. The miniaturization of these devices assists in extended battery life in portable devices, which makes them a crucial component in the technology landscape. In addition, miniaturization can lead to cost savings in terms of materials and manufacturing, as smaller components are often less expensive to produce.

DC-DC Converter Industry Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global DC-DC converter market report, along with forecasts at the global, regional, and country levels for 2024-2032. Our report has categorized the market based on mounting style, input voltage, output voltage, and application.

Breakup by Mounting Style:

Surface Mount

Through Hole

Through hole represents the largest market segment

The report has provided a detailed breakup and analysis of the market based on the mounting style. This includes surface mount and through hole. According to the report, through hole represented the largest segment. Through hole is a traditional and widely used method for attaching these converters to circuit boards. In this approach, the leads or pins of the converters are inserted through holes in the printed circuit board (PCB) and soldered on the other side. This method provides enhanced mechanical support and reliable electrical connections, which makes it suitable for applications where durability and stability are required. It is suitable for various industries, such as aerospace, automotive, and industrial automation, where environmental factors, such as vibration and shock resistance, are critical.

Breakup by Input Voltage:

5-36V

36-75V

75V and Above

5-36V accounts for the majority of the market share

The report has provided a detailed breakup and analysis of the market based on the input voltage. This includes 5-36V, 36-75V, and 75V and above. According to the report, 5-36V represented the largest segment. 5-36V input voltage range is versatile and adaptable to a wide range of applications. This range covers a broad spectrum of voltage levels commonly encountered in various industries, which makes these converters highly flexible. They can efficiently convert input voltages ranging from as low as 5 volts, often found in battery-powered devices and low-power electronics, up to 36 volts, which is typical in industrial and automotive systems. In addition, this input voltage can be utilized in various applications, such as automotive electronics, solar power systems, robotics, and industrial automation. Their ability to handle a diverse range of input voltages makes them suitable for powering devices in environments with fluctuating power supplies or those requiring compatibility with multiple power sources.

Breakup by Output Voltage:

3.3V

5V

12V

15V and Above

5V holds the biggest market share

The report has provided a detailed breakup and analysis of the market based on the output voltage. This includes 3.3V, 5V, 12V, and 15V and above. According to the report, 5V represented the largest segment. 5V output voltage is an essential component in a multitude of electronic devices and systems. This output voltage level is widely used in applications ranging from consumer electronics like smartphones, tablets, and universal serial bus (USB) chargers to industrial automation, embedded systems, and microcontroller-based projects. The 5V output voltage is especially popular because it aligns with the standard USB voltage specification. Additionally, many microcontrollers, sensors, and peripheral components operate optimally at 5V, which makes these converters a popular choice in various electronic designs.

Breakup by Application:

Smartphone

Servers PCs

EV Battery
Railway
Others

Smartphone dominates the market segment

The report has provided a detailed breakup and analysis of the market based on the application. This includes smartphone, servers PCs, EV battery, railway, and others. According to the report, smartphone represented the largest segment. These converters play a vital role in the functionality of modern smartphones. These devices require a stable and efficient power supply to operate seamlessly. Additionally, these converters are critical in delivering a superior user experience by enabling longer battery life, faster processing speeds, and vibrant displays. Apart from this, they contribute to the overall compactness of smartphones by allowing for a smaller battery size while maintaining high performance. Furthermore, these converters ensure that each component receives the precise voltage it requires for optimal performance.

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

Asia Pacific exhibits a clear dominance, accounting for the largest DC-DC converter market share

The market research report has also provided a comprehensive analysis of all the major regional markets, which include North America (the United States and Canada); Asia Pacific (China, Japan, India, South Korea, Australia, Indonesia, and others); Europe (Germany, France, the United Kingdom, Italy, Spain, Russia, and others); Latin America (Brazil, Mexico, and others); and the Middle East and Africa. According to the report, Asia Pacific accounted for the largest market share.

Asia Pacific held the biggest market share due to the increasing preference for electric vehicles (EVs) among the masses. In line with this, the rising demand for advanced electronic systems among individuals is bolstering the growth of the market in the Asia Pacific region. Moreover, the increasing need for efficient power conversion solutions to support automation and manufacturing processes is supporting the growth of the market. Apart from this, the rising popularity of solar power generation is contributing to the growth of the market in the region.

Competitive Landscape:

Several companies in the market are investing in research and development (R&D) activities to develop advanced converter technologies. This includes improving efficiency, reducing form factors, enhancing thermal management, and increasing power density. They are also focusing on innovating materials and manufacturing processes to make converters more reliable and cost-effective. In addition, manufacturers are working on creating converters with higher efficiency ratings, which not only reduce power consumption but also help in reducing heat generation and extending the lifespan of electronic devices. Furthermore, key players are offering customization services that allow customers to tailor these converters to their specific requirements. This is particularly valuable in industries with unique needs, such as aerospace and healthcare.

The report has provided a comprehensive analysis of the competitive landscape in the market. Detailed profiles of all major companies have also been provided. Some of the key players in the market include:

ABB Ltd
Bel Fuse Inc.
Delta Electronics Inc.
Fujitsu Limited
General Electric Company
Infineon Technologies AG
Meggitt plc
Murata Manufacturing Co. Ltd.
RECOM Power GmbH
STMicroelectronics
TDK Corporation
Vicor Corporation

Recent Developments:

In 2023, ABB Power Conversion expanded its already strong line of DC-DC bus converters with multiple new modules, such as a 1500-watt (W) converter, which is among the highest-powered quarter-brick DC-DC converters.

In 2023, TDK Corporation introduced the 250W rated TDK-Lambda RGA series of ruggedized non-isolated DC-DC converters that are capable of operating from an input voltage of 9 to 40V or 9 to 53V.

In 2021, Murata introduced several new non-isolated DC-DC converter lines, such as UltraBK™, MonoBK™, and PicoBK™ for distributed power architecture applications. They are developed to provide small size, high efficiency, decreased noise, low EMI, and take up less board space.

Key Questions Answered in This Report

1. What was the size of the global DC-DC converter market in 2023?
2. What is the expected growth rate of the global DC-DC converter market during 2024-2032?
3. What are the key factors driving the global DC-DC converter market?
4. What has been the impact of COVID-19 on the global DC-DC converter market?
5. What is the breakup of the global DC-DC converter market based on the mounting style?
6. What is the breakup of the global DC-DC converter market based on the input voltage?
7. What is the breakup of the global DC-DC converter market based on the output voltage?

8. What is the breakup of the global DC-DC converter market based on the application?
9. What are the key regions in the global DC-DC converter market?
10. Who are the key players/companies in the global DC-DC converter market?

Contents

1 PREFACE

2 SCOPE AND METHODOLOGY

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
 - 2.3.1 Primary Sources
 - 2.3.2 Secondary Sources
- 2.4 Market Estimation
 - 2.4.1 Bottom-Up Approach
 - 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

3 EXECUTIVE SUMMARY

4 INTRODUCTION

- 4.1 Overview
- 4.2 Key Industry Trends

5 GLOBAL DC-DC CONVERTER MARKET

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Market Forecast

6 MARKET BREAKUP BY MOUNTING STYLE

- 6.1 Surface Mount
 - 6.1.1 Market Trends
 - 6.1.2 Market Forecast
- 6.2 Through Hole
 - 6.2.1 Market Trends
 - 6.2.2 Market Forecast

7 MARKET BREAKUP BY INPUT VOLTAGE

7.1 5-36V

7.1.1 Market Trends

7.1.2 Market Forecast

7.2 36-75V

7.2.1 Market Trends

7.2.2 Market Forecast

7.3 75V and Above

7.3.1 Market Trends

7.3.2 Market Forecast

8 MARKET BREAKUP BY OUTPUT VOLTAGE

8.1 3.3V

8.1.1 Market Trends

8.1.2 Market Forecast

8.2 5V

8.2.1 Market Trends

8.2.2 Market Forecast

8.3 12V

8.3.1 Market Trends

8.3.2 Market Forecast

8.4 15V and Above

8.4.1 Market Trends

8.4.2 Market Forecast

9 MARKET BREAKUP BY APPLICATION

9.1 Smartphone

9.1.1 Market Trends

9.1.2 Market Forecast

9.2 Servers PCs

9.2.1 Market Trends

9.2.2 Market Forecast

9.3 EV Battery

9.3.1 Market Trends

9.3.2 Market Forecast

9.4 Railway

- 9.4.1 Market Trends
- 9.4.2 Market Forecast
- 9.5 Others
 - 9.5.1 Market Trends
 - 9.5.2 Market Forecast

10 MARKET BREAKUP BY REGION

- 10.1 North America
 - 10.1.1 United States
 - 10.1.1.1 Market Trends
 - 10.1.1.2 Market Forecast
 - 10.1.2 Canada
 - 10.1.2.1 Market Trends
 - 10.1.2.2 Market Forecast
- 10.2 Asia-Pacific
 - 10.2.1 China
 - 10.2.1.1 Market Trends
 - 10.2.1.2 Market Forecast
 - 10.2.2 Japan
 - 10.2.2.1 Market Trends
 - 10.2.2.2 Market Forecast
 - 10.2.3 India
 - 10.2.3.1 Market Trends
 - 10.2.3.2 Market Forecast
 - 10.2.4 South Korea
 - 10.2.4.1 Market Trends
 - 10.2.4.2 Market Forecast
 - 10.2.5 Australia
 - 10.2.5.1 Market Trends
 - 10.2.5.2 Market Forecast
 - 10.2.6 Indonesia
 - 10.2.6.1 Market Trends
 - 10.2.6.2 Market Forecast
 - 10.2.7 Others
 - 10.2.7.1 Market Trends
 - 10.2.7.2 Market Forecast
- 10.3 Europe
 - 10.3.1 Germany

- 10.3.1.1 Market Trends
- 10.3.1.2 Market Forecast
- 10.3.2 France
 - 10.3.2.1 Market Trends
 - 10.3.2.2 Market Forecast
- 10.3.3 United Kingdom
 - 10.3.3.1 Market Trends
 - 10.3.3.2 Market Forecast
- 10.3.4 Italy
 - 10.3.4.1 Market Trends
 - 10.3.4.2 Market Forecast
- 10.3.5 Spain
 - 10.3.5.1 Market Trends
 - 10.3.5.2 Market Forecast
- 10.3.6 Russia
 - 10.3.6.1 Market Trends
 - 10.3.6.2 Market Forecast
- 10.3.7 Others
 - 10.3.7.1 Market Trends
 - 10.3.7.2 Market Forecast
- 10.4 Latin America
 - 10.4.1 Brazil
 - 10.4.1.1 Market Trends
 - 10.4.1.2 Market Forecast
 - 10.4.2 Mexico
 - 10.4.2.1 Market Trends
 - 10.4.2.2 Market Forecast
 - 10.4.3 Others
 - 10.4.3.1 Market Trends
 - 10.4.3.2 Market Forecast
- 10.5 Middle East and Africa
 - 10.5.1 Market Trends
 - 10.5.2 Market Breakup by Country
 - 10.5.3 Market Forecast

11 SWOT ANALYSIS

- 11.1 Overview
- 11.2 Strengths

11.3 Weaknesses

11.4 Opportunities

11.5 Threats

12 VALUE CHAIN ANALYSIS

13 PORTERS FIVE FORCES ANALYSIS

13.1 Overview

13.2 Bargaining Power of Buyers

13.3 Bargaining Power of Suppliers

13.4 Degree of Competition

13.5 Threat of New Entrants

13.6 Threat of Substitutes

14 PRICE ANALYSIS

15 COMPETITIVE LANDSCAPE

15.1 Market Structure

15.2 Key Players

15.3 Profiles of Key Players

15.3.1 ABB Ltd

15.3.1.1 Company Overview

15.3.1.2 Product Portfolio

15.3.1.3 Financials

15.3.1.4 SWOT Analysis

15.3.2 Bel Fuse Inc.

15.3.2.1 Company Overview

15.3.2.2 Product Portfolio

15.3.2.3 Financials

15.3.2.4 SWOT Analysis

15.3.3 Delta Electronics Inc.

15.3.3.1 Company Overview

15.3.3.2 Product Portfolio

15.3.3.3 Financials

15.3.3.4 SWOT Analysis

15.3.4 Fujitsu Limited

15.3.4.1 Company Overview

- 15.3.4.2 Product Portfolio
- 15.3.4.3 Financials
- 15.3.4.4 SWOT Analysis
- 15.3.5 General Electric Company
 - 15.3.5.1 Company Overview
 - 15.3.5.2 Product Portfolio
 - 15.3.5.3 Financials
 - 15.3.5.4 SWOT Analysis
- 15.3.6 Infineon Technologies AG
 - 15.3.6.1 Company Overview
 - 15.3.6.2 Product Portfolio
 - 15.3.6.3 Financials
 - 15.3.6.4 SWOT Analysis
- 15.3.7 Meggitt plc
 - 15.3.7.1 Company Overview
 - 15.3.7.2 Product Portfolio
 - 15.3.7.3 Financials
 - 15.3.7.4 SWOT Analysis
- 15.3.8 Murata Manufacturing Co. Ltd.
 - 15.3.8.1 Company Overview
 - 15.3.8.2 Product Portfolio
 - 15.3.8.3 Financials
 - 15.3.8.4 SWOT Analysis
- 15.3.9 RECOM Power GmbH
 - 15.3.9.1 Company Overview
 - 15.3.9.2 Product Portfolio
- 15.3.10 STMicroelectronics
 - 15.3.10.1 Company Overview
 - 15.3.10.2 Product Portfolio
- 15.3.11 TDK Corporation
 - 15.3.11.1 Company Overview
 - 15.3.11.2 Product Portfolio
 - 15.3.11.3 Financials
 - 15.3.11.4 SWOT Analysis
- 15.3.12 Vicor Corporation
 - 15.3.12.1 Company Overview
 - 15.3.12.2 Product Portfolio
 - 15.3.12.3 Financials

I would like to order

Product name: DC-DC Converter Market Report by Mounting Style (Surface Mount, Through Hole), Input Voltage (5-36V, 36-75V, 75V and Above), Output Voltage (3.3V, 5V, 12V, 15V and Above), Application (Smartphone, Servers PCs, EV Battery, Railway, and Others), and Region 2024-2032

Product link: <https://marketpublishers.com/r/DF74F7CEBC29EN.html>

Price: US\$ 3,899.00 (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/DF74F7CEBC29EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below
and fax the completed form to +44 20 7900 3970