

Bidirectional On Board Battery Charger Market Size Worth \$2.97 Billion by 2029 - The Business Research Company

*The Business Research Company's
Bidirectional On Board Battery Charger
Global Market Report 2025 – Market Size,
Trends, And Global Forecast 2025-2034*

LONDON, GREATER LONDON, UNITED
KINGDOM, November 13, 2025

/EINPresswire.com/ -- "Get 20% Off All
Global Market Reports With Code

ONLINE20 – Stay Ahead Of Trade Shifts, Macroeconomic Trends, And Industry Disruptors

The logo for The Business Research Company, featuring a stylized bar chart with three bars of increasing height. The text "The Business Research Company" is written in a bold, black, sans-serif font to the left of the chart.

The Business
Research Company

The Business Research Company

How Much Is The Bidirectional On Board Battery Charger Market Worth?

The [market size for bidirectional on-board battery chargers](#) has experienced swift expansion in the past few years. Its size is projected to escalate from \$1.37 billion in 2024 to \$1.60 billion in 2025, boasting a compound annual growth rate (CAGR) of 17.0%. This sizable increase during the historic period can be ascribed to the rising uptake of electric vehicles, escalating governmental incentives for electric vehicle charging infrastructure, growing demand for energy-efficient transport, an increase in the price of fossil fuels, and increasing consumer knowledge on sustainable transportation.

“

The Business Research
Company's Latest Report
Explores Market Driver,
Trends, Regional Insights -
Market Sizing & Forecasts
Through 2034”

*The Business Research
Company*

The market for bidirectional on-board battery chargers is predicted to experience a swift expansion in the coming years, anticipated to reach \$2.97 billion by 2029, with a compound annual growth rate (CAGR) of 16.7%. The growth during this projection period is credited to a surge in the implementation of intelligent charging infrastructure, increased demand for reserve power solutions, the broadening of commercial fleet electrification, substantial investments in modernizing the grid, and an escalating preference for bidirectional charging solutions based in the home. The forecast duration will observe a rising trend in the development of high-efficiency converters, integration into fleet management systems, advances in battery lifespan

optimization, innovations in multi-vehicle charging solutions, and the development of vehicle-to-home (V2H) applications.

Download a free sample of the bidirectional on board battery charger market report:

<https://www.thebusinessresearchcompany.com/sample.aspx?id=28958&type=smp>

What Are The Factors Driving The Bidirectional On Board Battery Charger Market?

The bidirectional on-board battery charger market is anticipated to experience a growth spurt due to the rising uptake of electric vehicles (EVs). These EVs, powered either wholly or partially by electricity, offer an environmentally-friendly alternative to conventional internal combustion engines. The surge in EV adoption stems from heightened eco-consciousness, as individuals strive to cut down on greenhouse gas emissions and fight against global warming. Bidirectional on-board battery chargers improve the functionality of electric vehicles by offering not only efficient power charging from the grid but also the capacity to return energy, thereby facilitating vehicle-to-grid applications and optimized energy management. For instance, the U.S. Department of Energy, a federal agency based in the U.S, reported in February 2024 that a review of the monthly EV sales over the past three years demonstrates substantial annual growth for each month. With peak monthly sales hitting about 50,000 vehicles in 2021, ascending to roughly 80,000 in 2022, and exceeding 100,000 in 2023. Hence, the escalating adoption of electric vehicles (EVs) is fueling the expansion of the bidirectional on-board battery charger market.

Who Are The Major Players In The Bidirectional On Board Battery Charger Market?

Major players in the Bidirectional On Board Battery Charger Global Market Report 2025 include:

- Volkswagen Aktiengesellschaft
- Mitsubishi Electric Corporation
- Build Your Dreams Company Limited.
- Hitachi Ltd.
- Renault Société Anonyme
- ZF Friedrichshafen AG
- DENSO Corporation
- Hyundai Mobis Co Ltd.
- BorgWarner Inc.
- Delta Electronics Inc.

What Are The Upcoming Trends Of Bidirectional On Board Battery Charger Market In The Globe?

Leading firms in the bidirectional on-board charger (OBC) industry are prioritizing the development of innovative products like small, portable modular chargers that enhance power efficiency and facilitate smooth integration between vehicles and the home/grid. Dilong Newerg Eny Technology Hebei Co. Ltd., a manufacturer from China, unveiled a powerful 22kW bidirectional on-board charger in June 2024. This device is built to comply with international, European and American charging regulations like IEC 61851, DIN SPEC 70121, ISO 15118, and

GB/T 18487-2015. It accommodates single-phase and three-phase AC input with a maximum capacity of 22 kW and provides a flexible DC output voltage range between 200 V-850 V, ensuring its suitability with power grids in China, Europe, and the US. The charger achieves up to 96% energy transformation efficiency, and supports bidirectional energy flow for vehicle-to-grid (V2G) and vehicle-to-home (V2H) uses. It also displays smart protections against high voltage, high current, and temperature extremes. The device is engineered with an IP67 waterproof rating, liquid cooling, and parallel connection support that allows power amplification while maintaining a power factor of no less than 0.99.

Which [Segment Accounted For The Largest Bidirectional On Board Battery Charger](#) Market Share?

The bidirectional on board battery charger market covered in this report is segmented –

- 1) By Type: Silicon-Based, Silicon Carbide-Based
- 2) By Battery Type: Lithium-Ion Batteries, Lead Acid Batteries, Nimh Batteries, Solid-State Batteries
- 3) By Charging Technology: Alternating Current (AC) Charging, Direct Current (DC) Charging, Wireless Charging, Hy-Id Charging
- 4) By Application: Electric Vehicles (EVs), Renewable Energy System, Power Backup System, Electricity Grid Services
- 5) By End User: Residential, Commercial, Industrial, Public Charging Stations

Subsegments:

- 1) By Silicon-Based: Silicon-Based Unidirectional Charger, Silicon-Based Bidirectional Charger
- 2) By Silicon Carbide-Based: Silicon Carbide-Based Unidirectional Charger, Silicon Carbide-Based Bidirectional Charger

View the full bidirectional on board battery charger market report:

<https://www.thebusinessresearchcompany.com/report/bidirectional-on-board-battery-charger-global-market-report>

What Are The Regional Trends In The Bidirectional On Board Battery Charger Market?

For the given year, the Bidirectional On Board Battery Charger Global Market Report 2025 identified North America as the dominant region in the global market. However, the Asia-Pacific region is projected to experience the quickest growth in the specified forecast period. Other regions encompassed in the report include Western Europe, Eastern Europe, South America, the Middle East, and Africa.

Browse Through More Reports Similar to the Global Bidirectional On Board Battery Charger Market 2025, By The Business Research Company

Bidirectional Electric Vehicle Charger Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/bidirectional-electric-vehicle-charger-global-market-report>

On Board Charger Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/on-board-charger-global-market-report>

Electric Vehicle Ev Charging Panelboard Global Market Report Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/electric-vehicle-ev-charging-panelboard-global-market-report>

Speak With Our Expert:

Saumya Sahay

Americas +1 310-496-7795

Asia +44 7882 955267 & +91 8897263534

Europe +44 7882 955267

Email: saumyas@tbrc.info

[The Business Research Company - www.thebusinessresearchcompany.com](https://www.thebusinessresearchcompany.com)

Follow Us On:

• LinkedIn: <https://in.linkedin.com/company/the-business-research-company>"

Oliver Guirdham

The Business Research Company

+44 7882 955267

info@tbrc.info

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[X](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/866538800>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.