

Bidirectional Inverter Market is expected to reach a valuation of USD 8,452 Million in 2035, States Fact.MR

Bidirectional Inverter Market Expands with Renewable Energy Integration:
Demand for Energy Storage Solutions
Drives Market Growth.

ROCKVILLE, MD, UNITED STATES, June 30, 2025 /EINPresswire.com/ -- According to Fact.MR, a market research and competitive intelligence provider, the bidirectional inverter market was valued at USD 2,952 million in 2024 and is expected to grow at a CAGR of 10.2% during the forecast period of 2025 to 2035.



Directional conversion is critical to battery energy storage systems (BESS), solar PV deployments, electric vehicles (EVs), and microgrids because of the needs of these applications.

In light of the decentralization and sustainability trend in energy, bidirectional inverters offer seamless energy exchange between renewable energy sources, the grid and power storage units. With the employment of load balancing, backup power support and provision of net metering chances these inverters substantially augment energy management and reliability therefore crucial to both residential and industrial markets.

For More Insights into the Market, Request a Sample of this Report: https://www.factmr.com/connectus/sample?flag=S&rep_id=10801

In the commercial world bidirectional inverters are growing at a rapid rate, due to the continued increase in solar photovoltaic installations and deployment of electric vehicles. The addition of bidirectional inverters is increasingly becoming critical in the smart grid and distributed energy resource projects thus influencing the funding and expansion of this area by governments and industries in general.

They also have applications in V2G setups, the smart home, and the commercial grid, which reemphasizes the strategic value of these technologies. The pressure around the world to decrease emissions, gain energy independence, and create a smarter, more responsive grid has pushed bidirectional inverters from the edges to the foundation of modern.

Bidirectional inverter market growth is going to be impressive to a large extent because of the expanding use of renewable energy systems and storage solutions. The interest by countries to reduce emissions as well as maintain grid stability is projected to prompt a notable surge in smart power conversion devices such as bidirectional conversion devices. The capability of bidirectional inverters to control power flow successfully in integrated and independent hybrid systems cement their role as major players in energy transition technologies.

Key Takeaways from Market Study

The bidirectional inverter market is projected to grow at 2% CAGR and reach USD 8,452 million by 2035, The market created an absolute \$ opportunity of USD 5,252 million between 2025 to 2035.

North America is a prominent region that is estimated to hold a market share of 2% in 2035, North America is expected to create an absolute \$ opportunity of USD 1,588 million.

"Growing renewable energy adoption, increasing deployment of battery energy storage systems, and the expansion of electric vehicle infrastructure combined with rising investments in smart grids and energy decentralization will drive the bidirectional inverter market." says a Fact.MR analyst.

Leading Players Driving Innovation in the Bidirectional Inverter Market:

Key players of the bidirectional inverter industry are Huawei Technologies Co., Ltd., Sungrow Power Supply Co., Ltd., Fronius International GmbH, SolarEdge Technologies Inc., Enphase Energy Inc., SMA Solar Technology AG, GoodWe, Growatt New Energy Technology Co., Ltd., Delta Electronics, Deming Power, and Schneider Electric.

Market Development

Ongoing growth in the bidirectional inverter market is driven by the cooperation of large energy and technology firms with battery makers, smart grid implementers, and those involved in EV infrastructure. Advanced inverter solutions are now being offered, giving improved grid interactions, better connections with solar plus storage systems, and increased support for V2G applications. SMA Solar Technology, Huawei, and Delta Electronics are working with partners through research and development and acquisitions to improve bidirectional power conversion and strengthen their renewable energy businesses.

Manufacturers are launching smart inverters with integrated energy efficiency, real-time monitoring, and cybersecurity aims to satisfy users across residential, commercial, and utility segments. Implementing silicon carbide technology and artificial intelligence for energy control enhances how well inverters function, last, and react quickly to changes. Organizations use regional approach to guarantee adherence to a variety of grid guidelines and to provide viable solutions for area-specific energy matters. Local factories and support facilities are being created to minimize both delivery delays and shipping expenses. The use of digital twins in conjunction with cloud-based platforms by manufacturers permits the close observation of usage and fast firmware upgrades, showcasing how the sector is quickly innovating.

For example, in March 2024, Huawei's FusionSolar division unveiled a comprehensive residential smart PV solution that integrates an optimizer, bidirectional inverter, energy storage system (ESS), EV charger, load controller, grid interface, and PV management system. This innovation aims to streamline solar energy usage, storage, and management for enhanced home energy independence and efficiency.

Get Customization on this Report for Specific Research Solutions: https://www.factmr.com/connectus/sample?flag=S&rep_id=10801

More Valuable Insights on Offer

Fact.MR, in its new offering, presents an unbiased analysis of the the Bidirectional inverter market, presenting historical data for 2020 to 2024 and forecast statistics for 2025 to 2035.

The study reveals essential insights on the basis of the Type (Standalone Inverters, Grid-tied Inverters, Hybrid Inverters), Power Rating (Less than 10 kW, 10 kW to 50 kW, Above 50 kW), Application (Energy Storage Systems (ESS), Renewable Energy Systems, Electric Vehicles (EVs) and Vehicle-to-Grid (V2G), Uninterruptible Power Supply (UPS)), End Use (Residential, Commercial, Industrial, Utility), and across Major Regions of the World (North America, Latin America, Western Europe, East Asia, South Asia & Pacific, and Middle East & Africa).

Check out More Related Studies Published by Fact.MR Research:

The global <u>pallet inverter market</u> is projected to grow from USD 1.24B in 2023 to USD 1.87B by 2033 at a 4.2% CAGR, holding 3% of industrial lifting sales in 2022.

The global <u>portable inverter generator market</u> is set to grow from USD 3,404.1M in 2023 to USD 8,959.8M by 2034, registering a strong CAGR of 9.4%.

About Us:

Fact.MR is a distinguished market research company renowned for its comprehensive market reports and invaluable business insights. As a prominent player in business intelligence, we

deliver deep analysis, uncovering market trends, growth paths, and competitive landscapes.

Contact:

US Sales Office:

11140 Rockville Pike

Suite 400

Rockville, MD 20852

United States

Tel: +1 (628) 251-1583

Sales Team : sales@factmr.com Follow Us: LinkedIn | Twitter | Blog

S. N. Jha Fact.MR + +1 628-251-1583 sales@factmr.com

This press release can be viewed online at: https://www.einpresswire.com/article/826925949

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.