

Solid-State Transformer Market by Voltage Level (HV/MV, MV/LV), Application (Renewable Power Generation, Automotive, Power Grids, Traction Locomotives, and Others), and Region (North America, APAC, Europe, and RoW) - Global Forecast to 2030

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Abstracts

The solid-state transformer market size is expected to grow from USD 100 million in 2024 to USD 241 million by 2030; it is expected to grow at a CAGR of 15.8% from 2024 to 2030. The key factors driving the growth of the solid-state transformer market are growing alternative energy sector, and increasing investments in smart grids and energy systems.

“Market for HV/MV to account for larger market share during forecast period”

The HV/MV segment is expected to continue to hold a larger market size during the forecast period. The growth of the HV/MV segment of the solid-state transformer market can be attributed to the increased adoption of these transformers in renewable power generation applications. The outbreak and the spread of the COVID-19 have also impacted the growth of the solid-state transformer market globally. It is expected to witness a forward push from 2024 onward.

“Renewable power generation application to hold largest size during forecast period”

The renewable power generation application is expected to hold the largest market size during the forecast period. The growth of the renewable power generation segment of the solid-state transformer market can be attributed to the expected early adoption of

these transformers for power generation from wind, solar, and tidal energy. Wind energy is a key contributor to the power generated from the alternative sources of energy, while APAC is a leader in this field. Though conventional systems (step-up transformers and STATCOMs) are cost-effective solutions, solid-state transformers can be instrumental in playing the role of both step-up transformers and STATCOMs with improved reactive power compensation. This, in turn, is expected to lead to increased use of solid-state transformers for wind energy production.

“APAC is expected to capture largest market size during forecast period”

The APAC region is expected to hold the largest share of the solid-state transformer market during the forecast period. China and India are expected to be the largest consumers of solid-state transformers in APAC. The planned investments in energy infrastructure and technology by various APAC countries and the growth of the wind power market are likely to offer significant growth opportunities to the solid-state transformer market. China and India are the frontier markets for solid-state transformers in the APAC region, and the steady growth of renewable energy and electric vehicle charging infrastructure in these countries post-COVID-19 is expected to fuel the high growth rate of the solid-state transformer market in this region.

The break-up of the profiles of primary participants for the report has been given below:

By Company Type: Tier 1 = 40%, Tier 2 = 35%, and Tier 3 = 25%

By Designation: C-Level Executives = 48%, Directors = 33%, and Others= 19%

By Region: North America = 35%, Europe = 18%, APAC = 40%, and RoW = 7%

Major players expected to operate in the solid-state transformer market include Hitachi (Japan), Schneider Electric (France), Siemens (Germany), Mitsubishi Electric (Japan), General Electric (US), Eaton (Ireland), Varentec (US), Amantys (UK), Ermco (US), and SPX Transformer Solutions (US).

Research Coverage:

The research report on the global solid-state transformer market covers the market based on voltage level, application, and region. Based on voltage level, the market has been segmented into HV/MV, and MV/LV. Based on application, the solid-state

transformer market has been segmented into renewable power generation, automotive, power grids, traction locomotives, and others. The report covers four major regions, namely, North America, Europe, Asia Pacific (APAC), and Rest of the World (RoW).

Key Benefits of Buying the Report:

This report segments the solid-state transformer market comprehensively and provides the closest approximations of the overall market size, as well as that of the subsegments across different voltage levels, applications, and regions.

The report helps stakeholders understand the pulse of the market, expected market scenario and provides information on key market drivers, restraints, challenges, and opportunities.

The report helps to understand the COVID-19 impact on the solid-state transformer market

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