

Telecom Power System Market by Grid Type (On-Grid, Off-Grid, Bad-Grid), Component (Rectifiers, Inverters, Controllers, Converters), Power Source, Technology, Power Rating (Below 10 KW, 10-20 KW, Above 20 KW) and Geography - Global Forecast to 2028

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Report description:

The global telecom power system market is projected to grow from USD 4.2 billion in 2023 to USD 6.6 billion by 2028; it is expected to grow at a CAGR of 9.4% from 2023 to 2028. Telecom companies are actively looking for renewable energy sources such as solar and wind power to reduce their environmental impact. This has created a greater demand for telecom power systems that work smoothly with renewable energy. Moreover, the increasing use of IoT and cloud computing applications requires substantial power. Consequently, there is a growing need for telecom power systems that can provide reliable and efficient power to support these applications.

"Diesel-Solar based telecom power system is likely to exhibit fastest growth rate between 2023 and 2028"

Powering telecom towers with renewable energy sources is a step toward greener telecommunication power generation-mainly for towers in remote locations. Conventionally, the towers run on diesel gen-sets, which require significant costs for operation and maintenance. The recent price decrease of solar panels and batteries has paved the way for greater adoption of solar energy power systems to at least partially replace diesel with renewable energy sources.

"Power systems of 10-20 KW rating are likely to have second largest market share during the forecast period due to surging adopting in 5G towers and rectifier modules."

Medium-output (10-20 kW) power systems find application in 5G towers, standby generating sets, rectifier modules (3G series), outdoor power systems, rooftop base stations, and DC generators. These power systems have a power range between 10 kW and 20 kW. Configurable types of power supplies with medium output are the best option for intermediate power requirements. Additionally, the increasing use of medium-output power supplies in telecom applications is likely to augment the growth of this

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market. A few key players manufacturing power systems with 10-20 kW are Eaton, Eltek, Cummins, and ABB.

"Off-grid telecom power systems to offer lucrative growth between 2023 and 2028"

Off-grid telecom power systems have a minimal environmental impact due to their utilization of renewable energy sources, such as solar and wind power, which emit fewer pollutants than traditional power sources like diesel generators. These systems contribute to emission reduction, improve energy efficiency, and decrease reliance on fossil fuels, ultimately conserving finite resources and promoting a sustainable approach to powering telecom networks.

"Europe likely to be the second largest market for telecom power system between 2023 and 2028"

Europe has been the frontrunner in 5G trials and projects that are currently being carried out in various regions of the world. The European Commission and the member states have been encouraging cross-sector innovations through adequate policies and support to cross-sector hubs for experiments, trials, and large-scale pilot programs to facilitate the adoption of advanced telecom technologies, including 5G in the region. The need for and importance of telecommunication services has been increasing. Hence, the need for the installation of towers and networks has increased, further increasing the number of telecom power system components required across the region, which, in turn, drives the market growth of telecom power systems.

Breakdown of profiles of primary participants:

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

-□By Designation: C-level Executives = 30%, Directors = 40%, and Others (sales, marketing, and product managers, as well as members of various organizations) = 30%

-□By Region: North America = 40%, APAC = 23%, Europe=32%, and ROW=5%

Major players profiled in this report:

The telecom power system market is dominated by a few established players such as Eaton (US), Huawei Technologies Co., Ltd. (China), Cummins, Inc. (US), ZTE Corporation (China), General Electric (US), Delta Electronics, Inc. (Taiwan), and Schneider Electric (France) are the key players in the global telecom power system market.

Research coverage

This report offers detailed insights into the telecom power system market based on component (rectifiers, inverters, convertors, controllers, generators, heat management systems, others (power distribution units, circuit breakers, batteries, surge protection devices, solar or PV cells, wind turbines)), technology (AC and DC power systems), grid type (on-grid, off-grid and Bad grid), power source (diesel-battery, diesel-solar, diesel-wind power sources and multiple power sources), power rating (below 10 kW, 10-20 kW, above 20 kW) and region (North America, Europe, Asia Pacific (APAC), and Rest of the World (RoW) which includes the Middle East, Africa, and South America.

The report also comprehensively reviews market drivers, restraints, opportunities, and challenges in the telecom power system market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key Benefits of Buying the Report

-□Analysis of key drivers (increasing number of telecom infrastructures in remote areas, growing adoption of telecom services and high data traffic, rising awareness about reducing carbon footprint from telecom power systems, increasing investments in 5G network deployment), restraints (high deployment and operational costs, environmental concerns due to usage of diesel), opportunities (growing adoption of hybrid power systems, increasing technological advancements in cellular networks (5G, LTE services, etc.), surging requirements for advanced telecom infrastructure and M2M connections, rising use of GaN-based power devices with evolution of 5G technology), and challenges (lack of infrastructure development for energy management, design challenges for telecom power systems, need for frequent maintenance and monitoring) influencing the growth of the telecom power system market.

-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the telecom power system market.

-□ Market Development: Comprehensive information about lucrative markets - the report analyses the telecom power system market across varied regions.

-□ Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the telecom power system market.

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-Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Eaton (US), Huawei Technologies Co., Ltd. (China), Cummins, Inc. (US), ZTE Corporation (China), General Electric (US), Delta Electronics, Inc. (Taiwan), Alpha Technologies (US), ABB (Switzerland), Staticon Ltd. (Canada), and Schneider Electric (France).

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**Telecom Power System Market by Grid Type (On-Grid, Off-Grid, Bad-Grid),
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