Battery Management System Market by Battery Type (Lithium-Ion, Advanced Lead-Acid, Flow Battery, & Nickel Battery), Component, Topology (Centralized, Modular, Distributed), Application, and Geography - Global Trend and Forecast to 2022

Description:

The battery management system market is expected to grow at a CAGR of 20.5% between 2016 and 2022 to reach USD 7.25 billion by 2022. The battery management system market is driven by factors such as the growing need for battery management in electric vehicles and hybrid electric vehicles. Moreover, the high demand for battery management systems from the renewable energy storage system applications and growing trend of battery-driven public transport further drives the market.

“BMS for lithium-ion based battery to witness maximum growth during the forecast period”

The BMS market for lithium-ion–based battery is expected to witness the highest growth rate during the forecast period. The battery management system is integrated with lithium-ion–based batteries to protect and manage the battery pack. It is also integrated with lithium-ion–based batteries such as lithium polymer and lithium iron-phosphate among others. These lithium-ion batteries are widely used in applications in portable devices, electric vehicles, and renewable energy systems among others. The growth in these applications further drives the growth of the market.

“North America expected to hold the largest market share by 2022”

North America held the largest share of the global battery management system market in 2015 owing to the rapid adoption of battery management systems in various applications such as portable device, automotive, renewable energy storage system, and telecommunication among others in this region. Also, the growing trend of battery-powered automotive such as electric vehicles, e-bikes, and automated guided vehicle as well as the increasing number of projects in North America related to energy storage through renewable energy storage systems are expected to drive the battery management system market.

In the process of determining and verifying the market size for several segments and subsegments obtained through secondary research, extensive primary interviews were conducted with key opinion leaders.

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The break-up of the profile of primary participants is given below:
- By Company Type: Tier 1 – 43%, Tier 2 – 32%, and Tier 3 – 25%
- By Designation: C-level – 53%, Director Level – 26%, Others – 21%
- By Region: North America – 35%, Europe – 20%, APAC – 37%, RoW – 8%

The emerging trends of battery-driven public transport are likely to act as a significant application for battery the management system in the future. Many countries in Europe such as the U.K., Austria, Germany, Italy, and others are rapidly adopting trams and battery-driven buses to reduce emissions and ensure a green city. Battery management systems are used in trams and battery-driven buses to prevent over-charging and discharging of the battery, which is the main cause of inefficient battery life. It also manages the battery effectively and continuously supervises the state of charge of the vehicles. In addition to this, growth of datacenters is expected to create a major opportunity for the battery management system market in the coming years.

The major players in the battery management system market include Johnson Matthey Plc. (U.K.), Lithium Balance A/S (Denmark), Nuvation Engineering (U.S.), Valence Technology, Inc. (U.S.), Intersil Corporation (U.S.), Linear Technology Corp (U.S.), NXP Semiconductors N.V. (Netherlands), Texas Instruments Inc. (U.S.), Elithion Inc. (U.S.), Vecture Inc. (Canada), and Ventec SAS (France) among others.

The report will help the market leaders/new entrants in this market in the following ways:
1. This report segments the battery management system market comprehensively and provides the closest approximations of the revenue numbers for the overall market and the subsegments across the different verticals and regions.
2. The report helps stakeholders to understand the pulse of the market and provides them information on key market drivers, restraints, challenges, and opportunities.
3. This report will help stakeholders to better understand their competitors and gain more insights to
enhance their position in the business. The competitive landscape section includes competitor ecosystem, new product developments, partnerships, and mergers & acquisitions.

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