

Frost & Sullivan applauds Voltaiq

The U.S. market researchers awarded the Voltaiq's Core, a software-as-a service (SaaS) solution. The platform helps customers developing improved batteries.



Award for Voltaiq (Source: Frost & Sullivan)

Voltaiq Core works with data collected in OEM (original equipment manufacturer) test labs during product development, as well as data from battery management system (BMS) performance logs of grid energy storage systems, and CAN data from vehicle battery packs. "By helping to reduce the time required for battery testing without sacrificing product quality, Voltaiq Core accelerates time-to-market. Its non-destructive battery fingerprinting analytical technique provides deeper insights into a battery's internal chemical and physical characteristics without requiring costly and time-consuming teardowns. It has demonstrably reduced the lab-to-commercialization time by as much as 70 percent, compared to conventional analysis options," said Guhan Sriram from Frost & Sullivan. "The platform further automates the extraction of data from a variety of native formats and transforms it into a common, battery-specific format, enabling rapid large-scale longitudinal analysis regardless of data source."

The company offers additional software including Voltaiq Analytics, Voltaiq Notebook, and Voltaiq Reports. Voltaiq Analytics endows battery OEMs and product developers with the capability to perform fully customized analytics tailored to a customer's specific battery application requirement. Voltaiq Notebook aids comprehensive storage and analysis of metadata describing the way a battery was built and operated, while Voltaiq Reports supports automated reporting of Voltaiq analysis.

Meanwhile, Voltaiq launched a Battery Digital Twin capability that simulates the battery system's full-lifecycle performance, from development to operation, allowing researchers and OEMs to get a clear picture of a product's anticipated performance. The Battery Digital Twin comprises a comprehensive dataset including the battery's entire performance history as well as information describing the battery's component materials lots, manufacturing parameters, and operating environment. The Battery Digital Twin solution, which is unique and first-of-its-kind in the battery industry, further helps reduce the cost associated with developing and testing battery solutions.

"The development of a Battery Digital Twin is a key breakthrough in the battery industry, as it empowers OEMs to test their solutions and develop a more efficient battery for specific applications," noted Guhan. "Voltaiq continues to collaborate with its customers, including OEMs and universities, to enable better energy storage solutions. Voltaiq sets itself apart from other testing equipment manufacturers with its equipment-agnostic platform, which has positioned it for accelerated growth."

Each year, Frost & Sullivan presents this award to the company that has developed an innovative element in a product by leveraging leading-edge technologies. The award recognizes the value-added features/benefits of the product and the increased return-on-investment it gives customers, which, in turn, increases customer acquisition and overall market penetration potential.

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