

leagend Strengthens AI and Data Center Operations with Innovative UPS Battery Management Technologies

leagend SOLUTIONS answers this call with its UPS Battery Management Solution, designed specifically to meet rigorous demands of these Al-driven environments.

SHENZHEN, GUANGDONG, CHINA, June 18, 2025 /EINPresswire.com/ -- As artificial intelligence (AI) applications become increasingly embedded in critical infrastructure, the requirements for stable, uninterrupted power systems have grown considerably. Data



centers running AI workloads, renewable energy storage, telecommunications base stations, and industrial automation systems all rely on dependable battery management solutions to maintain operational continuity and equipment reliability.

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leagend empowers Al infrastructure operators to maintain efficient, reliable backup power systems, minimizing downtime and safeguarding critical data." *Arthur Kingsly* Power Stability Challenges in Al-Driven Operations

Al computing environments demand substantial and continuous electrical power. Even brief interruptions can lead to data loss, system downtime, and operational disruptions. Traditional methods for monitoring lead-acid UPS battery systems, which remain widely used in data center backup applications, often encounter several limitations:

Inadequate Tracking of Battery Aging: Continuous float charging can mask battery degradation, making voltage readings insufficient for evaluating actual battery State of Health (SoH).

Limited Data Transparency: The absence of real-time, precise battery metrics restricts operators from effectively assessing individual battery conditions and identifying early-stage failures.

Elevated Maintenance Costs: Conventional maintenance schedules often involve full battery pack replacements, leading to increased operational costs without necessarily addressing specific weak cells.

Delayed Fault Detection: Without instant alerts, battery faults can remain unnoticed until they compromise system performance or trigger outages.

Integrated Monitoring Approach

To address these operational challenges, leagend UPS battery management solution is increasingly adopting real-time monitoring technologies capable of continuously collecting and analyzing parameters such as voltage, current, internal resistance, and temperature. Such



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systems typically integrate data acquisition, network transmission, and visual management platforms to provide digitized battery condition insights.

Key capabilities in leagend UPS battery management solution include:

Continuous, high-precision data collection

Centralized visualization of battery health status

Cloud-based data storage to support remote monitoring

Customizable configurations to suit different data center environments and infrastructure scales

Complementary Remote Monitoring for Distributed Energy Systems

Beyond <u>the leagend UPS battery management solution</u>, <u>leagend battery remote monitoring</u> <u>solution</u> is being deployed across a wider range of application scenarios. These solutions gather multi-dimensional battery data via 4G, Wi-Fi, Bluetooth, or wired connections and transmit it to centralized platforms for real-time oversight. Through integrated analytics, operators gain tools for SoH evaluation, lifespan prediction, and fault warnings, which can significantly improve operational resilience in distributed power systems.

This type of monitoring framework has found applications in energy storage installations for solar and wind systems, electric vehicle charging infrastructure, communication networks, industrial machine rooms, and residential energy storage.

Industry Development Trends

Since 2014, battery monitoring technology providers such as leagend SOLUTIONS have concentrated on advancing precision, energy efficiency, and operational safety in battery management. The emergence of AI-centric infrastructure has further driven demand for intelligent, data-driven power management systems capable of supporting high-availability, decentralized, and resilient digital infrastructure.

As global data centers and AI infrastructure expand, real-time, multi-source battery monitoring systems are expected to play an increasingly important role in maintaining operational stability, optimizing energy use, and extending the service life of backup power systems.

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