

leagend SOLUTIONS Launches Precision Coulomb Counter Solution to Tackle Industry-Wide Battery Monitoring Challenges

leagend SOLUTIONS has launched its cutting-edge Coulomb Counter Solution to face persistent challenges in real-time battery monitoring and management.

SHENZHEN, GUANGDONG, CHINA, May 16, 2025 /EINPresswire.com/ -- As industries from electric vehicles to IoT infrastructure increasingly rely on dependable battery management, many organizations continue to face persistent challenges in real-time battery monitoring and power

management. [leagend SOLUTIONS](#), a pioneer in battery technology and management systems, has officially launched its cutting-edge Coulomb Counter Solution, purpose-built to address critical pain points across multiple sectors, including recreational vehicles, renewable energy, electrochemistry, and industrial applications.

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Global industries face mounting pressure to improve energy efficiency, operational safety, and remote monitoring capabilities. leagend Coulomb Counter Solution represents a timely and powerful tool.”

Arthur Kingsly



leagend coulomb counter solution

The Growing Challenges of Battery-Dependent Industries Across today's battery-dependent environments, precise battery health, power capacity, and remaining energy monitoring have become essential for operational safety, efficiency, and equipment longevity. Yet most conventional systems fall short in delivering reliable, real-time data. In recreational vehicles (RVs) and outdoor camping setups, users frequently face situations where imprecise battery power readings result in running out of power at inconvenient or critical moments. Even more, limited access to state of health (SoH) data means battery

degradation often goes unnoticed, posing safety and reliability risks.

Similarly, battery testing facilities and laboratories face a precision gap when evaluating battery discharge capabilities and real-time performance decay. Without accurate monitoring, predicting

lifespan and performance becomes guesswork.

Electric vehicle (EV) drivers and solar energy system operators also endure the shortcomings of outdated voltmeter-based monitoring systems. These traditional tools often fail to accurately measure state of charge (SoC), leaving users vulnerable to misjudging remaining power, potentially leading to operational interruptions or battery damage. In electrochemistry and electroplating industries, practitioners rely heavily on precise current and time measurements during experiments or production runs. Conventional tools frequently lack the accuracy necessary for high-stakes environments, negatively affecting product quality and experimental validity. Lastly, IoT networks and industrial applications increasingly require comprehensive, remote battery monitoring capabilities. The absence of efficient, integrated monitoring solutions for decentralized devices or systems leaves facility managers struggling with fragmented data, poor oversight, and limited proactive maintenance options.



RV



leagend SOLUTIONS

leagend Coulomb Counter Solution: Addressing the Market's Most Pressing Pain Points

Designed in direct response to these widespread challenges, leagend Coulomb Counter Solution offers a transformative approach to battery monitoring and management. By integrating directly in series with the battery's negative pole, the system measures real-time input and output currents with exceptional precision, accurately calculating remaining power based on full charge capacity and consumption history.

This new system serves as a critical tool for industries where accurate battery data is not just a convenience — it's a necessity.

Key pain points tackled include:

- In RV and Camping Applications: Accurate real-time tracking of battery state prevents inconvenient or hazardous power losses in isolated environments while providing early warnings for SoH deterioration.
- In Battery Testing Facilities: The solution enables high-precision evaluations of battery power

performance post-charge and offers real-time decay monitoring, ensuring better data for research and maintenance planning.

- In EV and Solar Power Systems: By offering precise SoC monitoring, leagend's system eliminates the limitations of voltmeter-type coulomb counters, protecting batteries from deep discharge or overcharge damage.
- In Electrochemistry and Electroplating: Accurate current, time, and power measurements improve experimental integrity and production quality, preventing costly errors or substandard outcomes.
- In IoT and Industrial Applications: Seamlessly integrating with microcomputers, the Coulomb Counter Solution provides reliable remote monitoring and data transfer for scalable industrial operations.

Technological Superiority and Comprehensive Advantages

The solution's comprehensive advantages include:

- Precise Algorithm: Outperforms industry norms by eliminating cumulative errors and delivering stable, reliable data.
- Custom-Tailored Services: Supports multiple current ranges and offers fully customized configurations, adapting to diverse industrial and commercial applications.
- Smart, User-Friendly Operation: Features a vibrant color display, Bluetooth connectivity, a dedicated mobile app, and both automatic and manual calibration capabilities, including power, voltage, current, and temperature adjustments.
- Safety and Reliability: Integrates threshold protection settings, along with safeguards against over-voltage and over-current, ensuring operational safety and equipment protection.
- End-to-End Service Model: Beyond hardware, leagend offers full software support, including app customization, as well as product ID design and manufacturing, supporting OEM and ODM collaborations.

Commitment to Sustainability and Global Support

Echoing leagend's long-standing dedication to sustainable energy solutions, the Coulomb Counter Solution not only enhances battery management efficiency but also contributes to extending battery lifespan and reducing replacement costs. By optimizing power consumption patterns, businesses can achieve both operational reliability and environmental responsibility. Moreover, leagend continues to build its global service network, ensuring rapid response times and localized support for customers worldwide.

Looking Ahead

As global industries face mounting pressure to improve energy efficiency, operational safety, and remote monitoring capabilities, [the leagend Coulomb Counter Solution](#) represents a timely and powerful tool. By resolving long-standing pain points in battery monitoring and management, this solution positions itself as an essential asset for businesses and organizations navigating the future of battery-reliant systems.

Arthur Kingsly

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