One-Stop Lithium Solutions for Motive Power Systems & Energy Storage Systems

Huizhou, Guangdong Jan 26, 2026 (Issuewire.com) - As global industries accelerate electrification and the adoption of renewable energy, lithium battery technologies are becoming increasingly important. From industrial vehicles and marine propulsion to off-grid and hybrid energy storage, customers increasingly seek integrated, reliable, and scalable solutions.

ROYPOW addresses this demand by delivering one-stop lithium solutions that combine motive power systems and energy storage systems across a wide range of applications. With vertically integrated technologies and a global manufacturing and service network, ROYPOW supports customers throughout their transition to cleaner, more efficient energy systems.

Integrated Expertise Across Motive Power and Energy Storage

With over two decades of combined experience in the renewable energy and power electronics fields, ROYPOW has developed in-house capabilities across critical technologies, including Power Conversion Systems (PCS), Battery Management Systems (BMS), Energy Management Systems (EMS), and motor controller algorithms. This system-level approach allows tighter integration between hardware and software, improving safety, efficiency, and long-term reliability. Continuous investment in research

and development has resulted in a substantial portfolio of authorized patents and technology certifications.

Comprehensive Motive Power Battery Portfolio for Industrial Applications

ROYPOW's motive power portfolio serves the growing electrification needs of industrial and commercial vehicles. As the pioneer advancing the shift from lead acid to lithium in the U.S.A market, we offer a complete range of lithium iron phosphate (LiFePO4) batteries designed for golf carts, including 36V, 48V, and 72V system configurations. These **golf cart battery solutions** have earned FCC and CE certifications for select models, ensuring compliance with international safety and electromagnetic compatibility standards.

For material handling applications, ROYPOW provides lithium forklift batteries from 24V to higher voltage platforms of up to 350V, covering a broad range of warehouse and industrial equipment. The portfolio includes solutions tailored for specific operating conditions, such as cold storage environments, high-intensity, multi-shift operations in high-temp environments, and hazardous locations requiring explosion-proof designs. Some battery models are designed based on EU DIN and UL BCI Battery Group Size standards to allow for seamless, drop-in-ready replacement for conventional lead-acid batteries. Certified to standards including UL, CE, FCC, RoHS, and IEC 62619, these forklift battery systems are engineered to meet international safety and performance requirements.

In addition, ROYPOW offers lithium battery solutions for golf carts, aerial work platforms, floor cleaning machines, construction machinery, and marine trolling motors. Dedicated forklift battery chargers are designed to match different voltage platforms and operational profiles, with certifications such as TUV-US, CEC, CE, FCC, EMC, and UKCA ensuring compatibility with regulated markets.

Energy Storage Systems: From Jobsites to Residential Applications

ROYPOW's energy storage portfolio addresses the increasing need for flexible, scalable power solutions across commercial, industrial, and residential sectors. The Jobsite Energy Storage Systems (ESS) provide stable, reliable power for construction sites, mining, outdoor large-scale events, emergency backup, agriculture, etc. The PC15KT Mobile Energy Storage System, certified to EN IEC 61000-6-2/4 and EN IEC 62109-1/2 standards, provides portable power wherever it's needed, reducing dependence on diesel generators while improving power quality and lowering emissions.

For larger-scale applications, ROYPOW develops diesel generator hybrid energy storage systems, including the X250KT and X500KT models. These hybrid power systems integrate battery storage with existing diesel infrastructure, enabling fuel savings of up to 50%, extended generator lifespan, and lower total cost of ownership.

The residential energy storage portfolio includes all-in-one residential systems, off-grid solar systems, solar batteries, and hybrid inverters that enable homeowners to achieve energy independence. ROYPOW's energy storage solutions also extend to specialized applications such as marine ESS for yachts and commercial vessels, RV electrical systems for recreational vehicles, and all-electric Auxiliary Power Units (APU) for commercial trucks. ROYPOW high-volt marine battery systems are certified with DNV and KR Type Approvals. Equipped with comprehensive safety protections, the system enhances propulsion and energy storage performance for fully electric and hybrid vessels as well as offshore platforms.

Real-World Applications Across Diverse Industries

ROYPOW's solutions serve customers across multiple sectors. In material handling, the company's lithium forklift batteries power warehouse operations for logistics companies transitioning from lead-acid technology. The batteries' fast-charging capability, opportunity charging compatibility, and maintenance-free operation reduce total cost of ownership while increasing fleet productivity. Golf course operators benefit from lightweight, long-lasting golf cart battery systems that extend vehicle range and reduce charging infrastructure requirements.

In the marine sector, ROYPOW's high-voltage lithium battery systems enable electric propulsion for commercial vessels, recreational boats, and workboats. The trolling motor battery solutions offer anglers reliable power for extended fishing trips without the weight and maintenance burden of traditional batteries. Construction companies utilize mobile ESS units to power tools and equipment at remote jobsites, eliminating diesel fuel costs and complying with emission regulations in urban areas. Residential customers installing solar energy systems rely on ROYPOW's energy storage solutions to maximize self-consumption, provide backup power during grid outages, and participate in demand response programs. The RV and truck markets benefit from all-electric climate control systems that improve driver comfort while reducing fuel consumption during rest periods.

Backed by Global Presence with Localized Support

ROYPOW has established a worldwide network designed to provide timely delivery and responsive technical support. Manufacturing bases in China and Indonesia serve as production hubs, while subsidiaries in the United States, Brazil, the United Kingdom, Germany, the Netherlands, South Africa, Iraq, Australia, Japan, and Korea provide regional sales and service capabilities. This infrastructure enables the company to understand local market requirements, navigate regulatory environments, and deliver solutions optimized for specific geographic needs.

The company's solar battery storage factory operations leverage economies of scale while maintaining flexibility to customize solutions for different applications. Whether producing standardized battery modules for high-volume markets or engineered systems for specialized applications, ROYPOW's manufacturing processes emphasize quality control, testing rigor, and supply chain reliability.

Looking ahead, the role of lithium battery technologies is expected to expand further across industrial, marine, and residential applications. ROYPOW continues to explore innovations in energy storage, system integration, and battery management to support more efficient, sustainable, and flexible motive power and energy storage solutions for the evolving landscape.

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