

BATTERY PACKS

A wide range of battery pack solutions designed & engineered for safety and reliability

A reliable power solution begins at the design stage. Leveraging our years of experience and mind for manufacturability, our focus is to meet the needs of our customers' specific applications.

At Inventus Power, we understand that a defect free battery pack starts with a well thought-out design that carefully considers and eliminates the potential for failure. In our almost 60 year history of designing and manufacturing battery packs across commercial, industrial, medical and military/government markets, we have proudly delivered 1 billion power products without any major safety issue or recall.

Plus, Inventus Power is the global leader in power systems manufacturing. Because we design, engineer and integrate all components of a power system (battery packs, chargers and power supplies) into one unified system, we are uniquely qualified to deliver the optimum power solution for your application.



KEY CAPABILITIES

- Cell evaluation and selection
- Multi-chemistry: Lithium based, NiMH, NiCd and supercapacitors/ultracapacitors
- Multi-configurations: round, flat, square, and custom
- Battery management integration
- Customized safety circuitry, fuel gauging, firmware design and cell balancing
- Extreme temperature and rugged environment pack development
- Smart battery technology
- In-house printed circuit board layout and assembly
- In-house mechanical design and tooling
- Soft pack, hard plastic enclosure and metal housing
- In-house testing & agency certifications
- Shipping regulations expertise, i.e. Class 9

WHY INVENTUS POWER?

Cell Technology Expertise

Selecting the proper cell for a pack design is one of the most critical aspects affecting size, cost, performance and quality. Inventus Power provides the latest cell technology along with in depth specification and performance knowledge.

- “Technology agnostic” when recommending cells/technology
- Broad view of cell development trends from multiple cell manufacturers
- Source cells from top tier cell manufacturers & qualify multiple cells up front to mitigate risk

Circuit and Firmware Design Expertise

Our technology experts possess in-depth experience in circuit and firmware design. We utilize state-of-the-art development methods and tools, and we have a large staff of experienced engineers that make up our electronic circuit design team, creating the optimal design layout of battery management circuitry. With complete in-house electronic circuit assembly, we can quickly get even the most complex designs from prototyping to production, significantly reducing your time to market.

Our application-specific experience includes:

- Fuel gauge circuits utilizing custom algorithms for calculating battery capacity and state of health
- Safety circuit designs with consideration to key application parameters such as inrush currents, charge and discharge rates and cell selection to provide the utmost protection for your battery
- Host communication solutions with the latest SMBus, 1-wire, 2-wire or proprietary protocols to allow the battery to communicate with the host device

Mechanical Design Expertise

Our team has experience designing battery enclosures of all types and can help you create one that will enhance the functional design of the product while assuring that the battery passes stringent shock, vibration and environmental testing required to certify the pack for shipping.



Contact us at
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to learn how our innovative
battery pack designs and global
manufacturing capabilities are
powering cutting-edge products.