## LiiON Lithium Stored Energy Solutions & Migration Services

LiiON, LLC, is a leader in safe, alternative stored energy solutions specifically designed for a wide variety of applications, including the data center, uninterruptible power system (UPS), telecom, cable, grid/peak energy and solar/wind enterprise markets. Delivering unparalleled quality and value, LiiON's stored energy solutions offer safe, reliable and competitive power-on-demand.

Our broad range of products are designed to meet the demands of the ever-changing energy world, including DC and AC products, battery solutions featuring LMMS<sup>TM</sup> and advanced

lithium ion, as well as high temperature lead acid (VRLA) batteries, and other emerging technologies. Please refer to the opposite page for more information on our comprehensive offering of solutions and services, including:

- UPS
- Telecom
- Cable
- Custom Solutions
- Services (Consulting, Technology Migration, Recycling, and Installation/ Preventive Maintenance)

## Making Lithium S.E.N.S.E.

(Stored Energy Network Systems Engineering)

LiiON designs application-specific solutions with unparalleled attention to detail. For every application we ensure:

- Correct chemistry
- Proven controls to protect the system and equipment
- Established multi-protocol communication between BMS and other systems
- Safe, reliable and proper interaction between solution and OEM equipment

Each LiiON design undergoes a rigorous functional safety evaluation. In addition to ensuring the proper chemistry, LiiON performs a Failure Mode and Effect Analysis (FMEA) on the cells, module, battery management system, software, and solution-level design.







## Stored Energy Solutions from LiiON

Te-Li-Com Series — LiiON's groundbreaking solution revolutionizes backup power for the telecom industry by integrating proven, patented lithium ion battery technology within a specially designed cabinet enclosure. Batteries offer significantly higher cycle and calendar life, superior abuse tolerance, are ecofriendly and exceptionally resilient to heat, while the solution's lightweight, durable modular enclosure delivers exceptional flexibility and protection.

**Stored Energy System (S.E.S.)** — The industry's first high rate discharge, UL-listed, lithium battery solution for uninterruptible power systems delivers safe power on demand to ensure long, reliable standby battery life with virtually zero maintenance. Other benefits include a major reduction in weight and footprint, a robust level of system communication and battery information, and the elimination of the need for lead-acid battery replacement.

Macro/Hybrid Base Station — Base station products include modular 48V-100A rackmountable systems, as well as turnkey cabinet solutions up to 1500A. Intrinsically safe design offers high cycle life, fast recharge and the ability to be float-charged.

Micro/4G/5G — Small cell backup power products designed for compact pole- or building-mount solutions in designs ranging from 500Whr to 5000Whr. Built-in battery management and monitoring provide protection and remote monitoring capabilities.

Pole/Pad Mount Cable — These 24, 36 and 48V lithium solutions are designed to fit into existing pole-mount or pad-mount cabinets, working with pole-mount UPSs and power supplies including Alpha XM2 and XM3 and Multilink's Blackhawk products. Configurations are available ranging from 30 minutes to 24 hours and beyond.

Custom Solutions — LiiON designs and manufactures custom solutions for a wide range of applications, including rail, solar, wind and switchgear. Each application utilizes numerous design inputs to ensure proper chemistry, system design, safety and communications.

Additional Products — Our product offering is always evolving, and currently includes High Temp Lead Acid Batteries; Lithium Battery Solutions; and Enclosures / Racks.

## **Services**

With more than 40 years of industry experience, LiiON is uniquely qualified to help you navigate the ever-changing technological spectrum. We are pleased to offer a variety of services, including:

**Consulting** — Stay apprised of the latest technology options and determine the optimal and most cost-effective solution for your application.

**Technology Migration** — LiiON Engineering Services can help you migrate from existing standby power technology to new longer-life, advanced lithium solutions.

Recycling — LiiON works with EPA-approved recyclers for proper handling and certification, assuring total compliance with state and federal EPA guidelines and laws.

Installation/Preventive Maintenance — We offer turnkey installation services and preventative management programs tailored to your needs, including site surveys, battery replacement, site and power upgrades, spare replacement parts, and on-site programs.

