

## Encell Technology's Atlas 160 Nickel Iron (NiFe) Batteries Outperform VRLAs

*Advanced NiFe battery performance provides exceptional benefits in microgrid applications; battery life extends to thousands of deep discharge cycles; float charge to 20 years.*

Alachua, Fla.—August 15, 2013 — Encell Technology, a next-generation energy storage battery and electronics company, introduces the Atlas 160 Nickel-Iron battery. The first production of these 160 Ampere-hour, front-terminal, 12 volt rechargeable batteries shipped this week.

This product is designed to replace traditional valve-regulated lead-acid (VRLA) batteries in demanding microgrid energy storage applications. Microgrid installations, consisting of a standby generator and solar energy panels, are commonly used to ensure continuous, reliable power in environments where utility power is erratic. Batteries in this application are frequently cycled and may undergo deep-discharge cycles.

Battery life of VRLAs is severely reduced by sustained deep-discharge cycles. Typical specifications show reduction from over 5,000 cycles at 20% discharge to just over 500 cycles at 80% discharge. In contrast, the Encell Atlas 160 NiFe cycle life under similar deep-discharge operating environments approaches 9,000 cycles. For a typical installation, this extended deep-discharge performance can result in a dramatic reduction in the number of batteries needed without compromising battery life.

“The advanced NiFe battery chemistry of the Atlas 160 completely eclipses the performance of industry-standard VRLAs in this application,” said Robert Guyton Jr., Encell Technology’s Chairman and Founder. “The economic benefits in terms of the number of batteries required and the frequency of replacement make the Atlas 160 the clear winner.”

The Encell Atlas 160 weighs 120 lbs and is packaged in the standard, front terminal configuration with maximum dimensions (5.3 x 22.3 x 13.0 in) similar to comparable VRLAs. High-end temperature ranges for both operation (100 degrees C) and

storage (60 degrees C) exceed VRLA specs. Float charge battery life of the Atlas 160 is up to 20 years - several times longer than comparable VRLAs.

When energy available over the entire cycle life of a battery is considered, the Atlas 160 product cost is one-tenth that of a lead acid battery with similar name plate capacity.

## **About Encell Technology, Inc.:**

Encell is a leading developer and manufacturer of next generation batteries and battery management solutions. Their advanced nickel-iron batteries are uniquely suited to rapidly growing market segments including wireless communications, cloud computing, mobile technology, renewable energy and automotive, and provide superior functionality in applications such as energy storage, hybrid micro grids, industrial vehicles and emergency backups. Encell also provides a state-of-the-art battery storage and management system to better enable the use of alternative energy in commercial and industrial settings. Encell's innovative battery management solution, the Sentinel Smart Power System™, has patented capabilities in battery charging, maintenance and management that substantially reduce backup power maintenance costs, enhance visibility into battery health and extend the lifespan of battery backup systems. Encell's patented techniques streamline the traditional battery manufacturing process, allowing it to provide higher quality batteries at lower costs. Sandia National Laboratory has validated Encell's technology. The company's client base includes leading blue-chip domestic and international customers. Encell is headquartered in Alachua, FL with additional offices in Boston, MA and New Delhi, India. For more information, visit [www.encell.com](http://www.encell.com).

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