# Rechargeable Lithium-Ion Cells for Remote Wireless Applications

Lake Success, NY – Tadiran Batteries has introduced the TLI Series of batteries, a new family of long-life rechargeable lithium-ion cells designed specifically for use in harsh environments.

Standard rechargeable lithium-ion cells have inherent drawbacks, including short operating life (max 5 years), low maximum cycle life (1,000 cycles), high annual self-discharge (up to 60% per year), and limited temperature range (0°C to 60°C) with no possibility of charging at low and high temperatures.

By contrast, TLI Series batteries utilize technology found in Tadiran's patented hybrid layer capacitor (HLC), which stores the high current pulses required for two-way wireless communications, and has been field-proven in millions of cells to deliver 25+ year service life. TLI Series batteries modify this technology to deliver reliable, long-term performance under extreme environmental conditions. TLI Series batteries feature:

- An operating temperature range from -40°C to 85°C, with storage temp up to 90°C.
- The ability to deliver current pulses up to 5 A.
- An annual self-discharge rate of <5%.
- Up to 5,000 full cycles.
- An operating life of 10 years.

- Charging that is possible at extreme temperatures (10 hour rate).
- A glass-to-metal seal (others use crimped seals that are prone to leakage).

TLI Series cells can be recharged using DC power or can be used in conjunction with photovoltaic solar systems or other energy harvesting devices to deliver reliable long-term power. They are available in several standard configurations: AA-size (1550), 1530, and 1520, as well as custom battery packs.

*For more information, visit* www.tadiranbat.com *[1].*

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[1] http://www.tadiranbat.com/