

New TLI battery: Solution for extreme conditions

Tadiran launches rechargeable lithium-ion cells for remote wireless applications



Tadiran Batteries has just 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 (maximum 5 years), low maximum cycle life (1000 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. Tadiran's technology 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.

Their features:

- wider operating temperature (– 40 °C to 85 °C, with short term storage up to 90 °C)
- ability to deliver high current pulses (up to 5A)
- low self-discharge rate (less than 5 % per year)
- up to 5 times more life cycles (5000 full cycles)
- longer operating life (10 years)
- charging possible at extreme temperatures (10 hour rate)
- glass-to-metal seal

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: 1550 (AA-size), 1530, and 1520, as well as custom battery packs.



For more information, please contact:



Tadiran Batteries GmbH, Industriestr. 22, 63654 Büdingen/Germany,
phone: +49 (0) 6042 954-0, e-mail: info@tadiranbatteries.de, www.tadiranbatteries.de