

Applications

Rose Knows Batteries: Providing engineering help

Rose offers many resources to help you engineer your product better. We offer an [Engineering Hotline](#) for those who want to speak with a real, technical, experienced person regarding their needs. Our website features [Battery Builder](#), where you can design your own pack and then request a quote. It also features a [Technology Library](#), complete with Battery University, Articles, and Free Report on "Five Common Mistakes in Designing Batteries". **Call [Rose Electronics](#), your [technical resource](#) for batteries and power needs.**



[Build a battery on the Rose website!](#)

Need to go from cells to a custom lithium ion battery pack? See which battery configuration is best suited for your application! Go to the [Rose Electronics website](#) and check out our new [battery builder](#) to create your custom pack today!

Products

Tadiran AA withstands 15A pulse/5A continuous drain

Tadiran's new high voltage/high rate AA-sized lithium battery, the TLM 1550HP, packs a punch with 2Wh of energy, an open circuit voltage of 4.0 volt, and the ability to handle pulses of up to 15A, with a continuous



5A load at 4.0V. Product can be shipped as non-Hazardous, has a wide operating temperature range (-40°C to +85°C) and is good for extended storage. [Contact Rose](#) for product spec sheet on the Tadiran TLM 1550HP lithium primary cell.

Did you know?

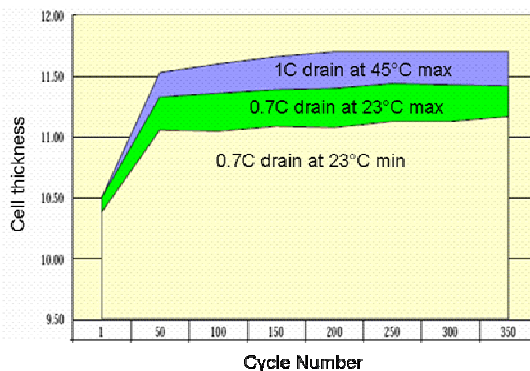
Rose will exhibit at the **Portable Power Developer's Conference in San Jose on April 18-20, 2005**. For more information and for registration details, go to <http://www.darnell.com/ppdc>

Rose Knows Batteries - Technology Notes

Focus on Prismatic Li-Ion & Li-Polymer swelling

It is intrinsic to all li-ion prismatic and li-polymer cells that they will swell over time. The degree of swelling will depend on the cell type, drain rate, temperature, and number of cycles. This chart illustrates a typical swelling factor of a 10.3mm thick li-ion cell. For this reason, stacking prismatic li-ion & polymer is generally not recommended. Even if you don't stack, make sure and allow for about 10% swelling factor in your design.

Cell thickness after cycling: Li-Ion Prismatic 10.3mm cell



Make sure you know the transport rules for lithium batteries. Visit www.rosebatteries.com

About Rose Electronics

Rose is a leading supplier of batteries and power solutions for the **GPS mobile systems, medical device, industrial field service equipment and enterprise storage solution** marketplaces. Rose has earned the trust, respect and loyalty of some of the most demanding OEMs. Call us at 1-800-632-4789 or visit www.rosebatteries.com.