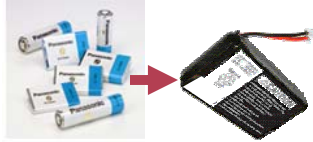


Applications

Rose Knows: Industrial Measurement Applications

Industrial measurement applications require a wide array of voltage and run time requirements, depending on the product's use profile. Factors such as temperature and current loads will directly affect which battery chemistry should be chosen. **Get technical help from Rose Electronics, your technical resource for batteries.** From sealed lead acid to nickel metal hydride to lithium ion and polymer, Rose Electronics is ready to help you. [Contact Rose](#) today!



BUILD A BATTERY

Need to go from cells to a custom lithium ion battery pack? See which battery configuration option is the 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

High Drain Capable Li-Ion 18650 from E-One/Moli

The IMR18650E cell from E-One/Moli Energy consists of a manganese dioxide positive electrode material and a graphitic carbon negative electrode providing 3.85V and a capacity of 1400mAh at C/5. This cell can take a maximum



continuous discharge of 20A (14C!) and can be charged at 2A. So, while their rated capacity is lower capacity than cobalt/graphite cells, for applications that demand high drain rates this cell is outstanding as it maintains a high voltage, even under heavy load. Standard cobalt/graphite cells are generally rated for only 1.5C-2C maximum drain. [Contact Rose](#) for more information on the E-One/Moli IMR18650E cell.

Did you know?

Rose Electronics offers a variety of reference materials to help you understand the nuances of designing battery packs, including the popular white paper, "5 Common Mistakes Engineers Make in Designing Batteries". [Contact Rose](#) for your free copy!

Rose Knows Batteries - Technology Notes

NEW US-DOT and ICAO-IATA TRANSPORTATION RULES FINALIZED

The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) long-awaited lithium battery final rule has recently been published in the *Federal Register*. (72 Fed. Reg. 44930.) It incorporates many of the changes from the Agency's April 2, 2002 proposed rule and December 14, 2004 interim final rule and **makes substantial regulatory and formatting changes to the lithium (and lithium ion) battery provisions in U.S. hazardous materials regulations (HMR)**. The effective date for the majority of the rule changes is January 1, 2008; however, new marking, documentation, and packaging requirements are mandatory starting October 1, 2008. The final rule has a lengthy preamble including comments on existing rules and subsequent PHMSA responses, the Agency's opinion on risks of lithium batteries in transportation and incidents in transportation, and recent battery recalls. This preamble allows an understanding of how PHMSA developed these regulatory requirements. [Contact Rose](#) for your updated set of HMR rules and changes to lithium shipping regulations



Make sure you know the latest 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.

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