

EDITORIAL

Price continues to be one of the main factors seriously restricting further propagation of supercapacitors. While being challenged by batteries and conventional capacitors the product is slowly finding its way in various industries. In spite of applicability of super capacitor from the technical standpoint, it will be always frowned on if the subsequent cost is high.

Bearing the foregoing in mind we price our supercapacitors as low as possible. Our clients enjoy even more savings because there is no hidden cost of integrating individual cells. Most of the commercially available supercapacitors nowadays are single cell devices rated at 2.5 or 2.7 volts. The ensuing cost of integrating such cells into a high voltage system is mind boggling. Our products fit right on the existing industrial system. For instance, the North American UPS bus voltage is 540 Vdc. You will go nuts soldering together hundreds of 2.5 V cells and balancing them to boot. Reliability of such a system is also a major headache. Lose a joint or a cap and kiss the whole system “good bye”. To keep your sanity we have developed special UPS products whereby a single supercapacitor is good for 270 V. It takes only two units in series to produce 540 V. What a relief!

In our products the by-polar cells are stacked under axial load, the same approach as in the Ballard fuel cell. The resulting strain decreases internal resistance of the unit. We also reduce the cell voltage to get more longevity. The stack is packaged in a steel canister using epoxy as a dielectric barrier between live components and the steel. The canister is painted in accordance with electrical code. Each canister is equipped with a pressure relieve valve set to open at 15 psig. This feature is needed to qualify the canister as a non-pressure vessel. In case of fire the unit would not explode which is good news in itself.

Our capacitors are designed to compliment batteries. There is no way any capacitor could rival a battery when it comes to energy density. Capacitors perform a hardening function resulting in much longer battery life. In a battery/capacitor system the energy density of capacitors is not as important as their efficiency, durability and cost. The synergy of the battery/capacitor storage system is a win – win solution.

Our new industrial supercapacitors are built to perform with batteries or without. The design criteria are the same as in lead acid battery - to give our clients the best bang (discharge, that it) for their buck!!!

Please discuss your application with us. Call: 905 726-7244 or 905 771-0544.