



JM Energy Corporation has developed the world's first flat prismatic type lithium ion capacitors and associated control module

YAMANASHI - February 28, 2011 - JM Energy Corporation (President: Goro Miyabe) announces to have developed flat prismatic type lithium ion capacitors and associated control modules. Samples shipment will start in this spring.

Utilizing its unique technology, JM Energy developed a flat prismatic type structure with a larger surface area than a conventional cylindrical-can type and therefore higher heat radiation efficiency, resulting in suppressing degradation due to heat generated during charging and discharging. The design allows cells to be placed in a series-parallel configuration without clearance, contributing to downsizing the entire system.

Two product models, a high power product (2000-Farad class) and a high-capacitance product with an identical cell size (3000-Farad class), are available and shipment of samples will be started. This project has been taken up as a Fiscal 2010 Project for Encouraging the Siting of Low-carbon-emission Employment Creating Business Operations, sponsored by the Ministry of Economy, Trade and Industry, and is scheduled to be put into full-scale commercial production on a dedicated production line (with a production capacity of 120,000 cells/year) beginning this fall.

In tandem with this development, JM Energy has created control modules exclusively for flat prismatic type lithium ion capacitors, to enable downsizing and space savings in applications requiring high voltages. These modules are compatible with multi-series-connections between modules, promising wider applications in the high voltage field. Their use ranges extensively in applications such as peak current assistance and storage in industrial, construction, and transportation machinery, backup power supplies, standardization of voltages and energy regeneration, covering both low and high voltage areas.

JM Energy's flat prismatic can type lithium ion capacitors and associated control modules will be on display at the International Rechargeable Battery Expo to be held at Tokyo Big Sight for three days from March 2 to 4.

Also on display will be new low-resistance-type laminate-based lithium ion capacitors; their internal resistance is reduced to about one third that of conventional counterparts (to be released this spring).

<Photo: JM Energy's flat prismatic type lithium ion capacitor and its control module >



Flat prismatic type lithium ion capacitor



Control module for the flat prismatic type lithium ion capacitor