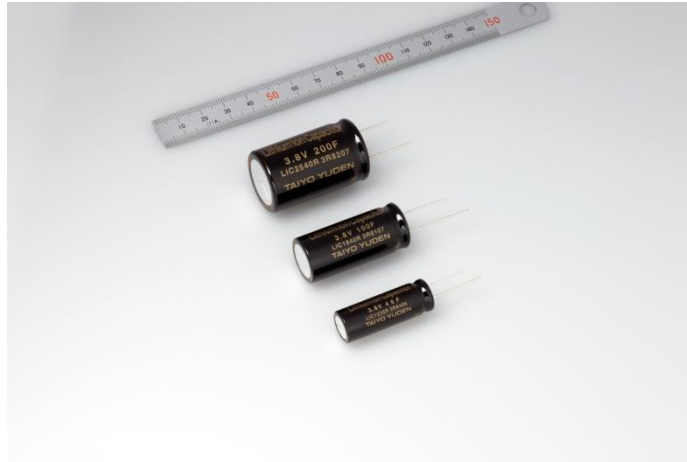


For immediate release

**TAIYO YUDEN Announces:  
Cylinder Type Lithium Ion Capacitor Capable of Operating up to 85°C**

*Operating at 70°C at a maximum operating voltage of 3.8V this product is ideal for Smart Grids and SSD Storage Servers*



TOKYO, September 13, 2012 - TAIYO YUDEN CO., LTD. announced today another of its super high-end products, the cylinder type lithium ion capacitor with high energy density and long life characteristics. This product has been adapted for high temperature operation by successfully raising the upper temperature limit of its operating range to a maximum of 85°C.

These products are used in several applications including backup power supplies for the main units of smart meters or for the centralized meter reading system, which together make up a smart grid. In addition, the products are also used in momentary power failure backup applications, for example, in SSD storage servers. By optimizing the structure of the capacitor, TAIYO YUDEN has improved the upper limit of the operating temperature range to 70°C at a maximum operating voltage of 3.8V, and to 85°C for 3.5V (conventionally, these were previously at 60°C).

Production will commence at our subsidiary company, TAIYO YUDEN ENERGY DEVICE CO., LTD. (Ueda, Nagano prefecture), from September 2012, at a production rate of 100,000 units per month. The sample price is 500 yen per unit for LIC1235R3R8406, 1,000 yen per unit for LIC1840R3R8107, and 2,000 yen per unit for LIC2540R3R8207.

### **Technology Background**

TAIYO YUDEN has enhanced the capability of smart meters and centralized meter reading systems that are used in smart grids which enable various electrical power controls via a communication function. This is critical to these systems and needed to better provide different power supply and demand, such as the prevention of blackouts and the adjustment

of power transmission, by adding the use of wireless communication functions and real-time clock functions. For this reason, a longer life is required, and a large current must be supplied during wireless communication as compared to the batteries that have been used as power supplies for backup with conventional meters. The cylinder type lithium ion capacitor, characterized by its high energy density, long life, and high voltage, is now being adopted for these kinds of applications.

Smart meters must be used outdoors and the performance of mounted parts must be guaranteed at high temperatures. Conventional cylinder type lithium ion capacitors could only support an upper limit for the operating temperature range of 60°C, and there has been a requirement in the past for them to be guaranteed to work at higher temperatures.

By optimizing the structure of the cylinder type lithium ion capacitor TAIYO YUDEN was able to improve reliability while maintaining the size, capacitance and internal resistance of the capacitor and by improving the upper temperature limit of the operating range. Operation at 85°C was also achieved with a maximum operating voltage of 3.5V.

TAIYO YUDEN intends to accelerate its efforts in the field of energy devices and we will further development products such as Lithium Ion Capacitors to accurately respond to the growing market needs for energy devices. This is an example of our commitment and ability to bring these products to the market and address these needs.

**These products will be exhibited in the TAIYO YUDEN booth at “CEATEC JAPAN 2012” to be held at the Makuhari Messe (Mihama-ku, Chiba-City, Chiba Prefecture) from the 2nd of October of this year.**

#### ■ Applications

In backup power supplies for centralized meter reading systems and smart meters, etc., and in such applications as the temporary power failure backup of SSD storage servers, etc.

The line-up for the cylinder type Lithium Ion capacitor released this time is as follows.

Ordering code	Max. usable voltage	Min. voltage	Nominal capacitance	Internal resistance	Operating temperature range	Dimensions / $\phi$ D	Dimensions / L
LIC1235R3R8406	3.8V	2.2V	40F	150m $\Omega$	-25 to 85 °C(3.5V)	12.5mm	35.0mm
LIC1840R3R8107			100 F	100m $\Omega$		18.0mm	40.0mm
LIC2540R3R8207			200 F	50m $\Omega$	-25 to 70 °C(3.8V)	25.0mm	40.0mm