



# Lithium Ion Capacitor **ULTIMO**

## Challenge for Low Carbon Society

~Aspire "Ultimate" storage device~

"ULTIMO" possesses the advantage of both lithium ion battery and electric double layer capacitor.

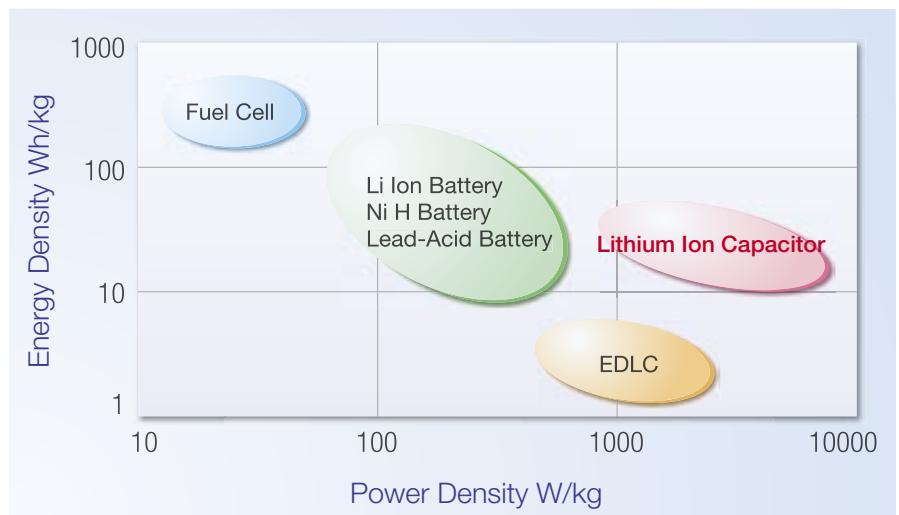
JM Energy is providing the solutions for your low carbon path by efficient energy use, smaller and lighter products in your various product design.



### Feature of **ULTIMO**

- High working voltage
- High energy/power density
- Fast charge/discharge characteristic
- Wide operation temp. range
- Excellent durability/reliability
- Small self discharge
- High safeness

### Comparing Lithium Ion Capacitor with other electric storages



### Typical properties

Measurement items	New		Development goods		Conditions		
	Laminate type		Can Type				
	1100F Low Resistance CLQ1100S1A	2200F Low Resistance CLQ2200S2A	2300F	3300F			
Range of Operating Temperatures	-30°C~70°C	-30°C~70°C	-30°C~70°C	-30°C~70°C			
Rated Voltage	Max.	3.8V	3.8V	3.8V			
	Min.	2.2V	2.2V	2.2V			
Initial Characteristics	Capacitance	1100F	2200F	2300F	3300F	10CA Constant current discharge, 25°C	
	ESR	0.8mΩ	0.5mΩ	0.6mΩ	0.7mΩ	1kHz	
	DC-IR	1.2mΩ	0.7mΩ	0.7mΩ	1.0mΩ	10CA Constant current discharge, 25°C	
	Weight E Density	10Wh/kg	10Wh/kg	8Wh/kg	12Wh/kg	10CA Constant current discharge, 25°C	
	Volume E Density	19Wh/L	19Wh/L	15Wh/L	20Wh/L		
Temp Dependence	-20°C 70°C	Capacitance ratio (vs 25°C)	90%	90%	90%	90%	10CA Constant current discharge
			100%	100%	100%	100%	
Self Discharge Characteristics	Voltage Reduction	< 5%	< 5%	< 5%	< 5%	3 Months, 25°C	
Cell size		180x126x5.5mm	180x126x10.9mm	150 x 91.5 x 15.5mm	150 x 91.5 x 15.5mm	Without terminal	

The information contained herein may change without prior notice.

Contact