

Electric Double Layer Capacitor

# LS Ultracapacitor

Standard Module

Custom Module



**LS Cable Ltd.**

555, Hogye-dong, Dongan-gu, Anyang-si, Gyeonggi-do, 431-831, Korea

Website: [www.lscable.com](http://www.lscable.com)

## About LS Cable Ltd.

LS Cable is the flagship of LS group which was divided from LG group in 2003 to concentrate our specialized industry. LS group is focusing on industrial system, electric power, energy and electronic components.

LS Cable is No. 1 cable maker in Korea and creating new business particularly in component and materials industry like Ultracapacitor. LS Cable makes its best to accomplish the vision, 'Your No.1 Creative Partner' and be one of the world leaders with high technology and best level of service.

## About LS Ultracapacitor

LS Ultracapacitor is one of promising energy storage device like fuel cell and advanced rechargeable batteries. LS Ultracapacitor can complement advanced rechargeable batteries and conventional capacitor in terms of power and energy density. Furthermore, wide operating temperature (-40 °C ~ 60 °C) and high reliability of LS Ultracapacitor enable to use in various applications.

## About Custom Module

LS Ultracapacitor has separate module development team to develop custom modules. All your request could be realized with our custom module specialists. Please fill the "UC Module Development Request Form" which is on next page and send it to us.

LS Cable will provide customer oriented Leading LS Ultracapacitor Module Solution with LS product (LS cable : Automotive Cable, Connector, Aluminum Product / LS Industrial System : Inverter, EV Relay) and technology



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## About Standard Module

LS Ultracapacitor Module provides leading solution for high voltage and current required application by connecting 3000F Ultracapacitor unit cell in series. Higher voltage and capacitance module can be built simply by connecting the modules.

Low internal resistance and high working voltage features of module maximize its available energy while keeping maintenance free, high reliability and wide operating temperature features of LS Ultracapacitor unit cell.

## Standard Module Specifications

Item \ Type	6 Series	12 Series	18 Series	24 Series	30 Series
Rated Capacitance (F)	500	250	166	125	100
Max. Voltage (V)	16.8	33.6	50.4	67.2	84
ESR, DC (mΩ)	3	6	9	12	15
Dimension-W (mm)	130	130	130	130	130
Dimension-D (mm)	180	355	530	700	870
Dimension-H (mm)	220	220	220	220	220

\* Specification of LS Ultracapacitor cell/Module may change without prior notice for production improvement. Please contact LS Cable Ultracapacitor team for further details.

## Features

- Low Internal Resistance.
- Balancing and Overvoltage Protection of Individual Cell
- Easy Build-up Design for High Voltage Module
- Efficient Heat Transfer to Outside.
- Pressure/Moisture Control Vent

## Notes

- Do not reverse polarity.
- Do not overcharge.
- Do not open.
- Do not put into fire.
- Do not deform terminals.
- Use capacitors according to operating temperature.

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## Ultracapacitor Custom Module Development Request Form

Thank you so much for your interest in LS Ultracapacitor module and we request following information. The information will be used to design and develop Ultracapacitor Module.

Specifications particular to System	Value
Ultracapacitor System Capacitance	
Max. Voltage of System	
Min. Voltage of System	
Max Power and Holding Time	
Max Current of System	
Ultracapacitor System Working Profile	
Exterior Casing	Details
Volume & Weight Limit	
Additional Function Needed (Cooling System, Encloser Type etc)	
Operating Environment	Details
Ambient Temperature	
Humidity	
ETC	Details
End of Life Condition (by customer)	
Ref: Ordinary LS Ultracapacitor end of Life (EOD) condition is 70% capacitance or 2x ESR from initial value.	

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**Remark**

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