Press Release

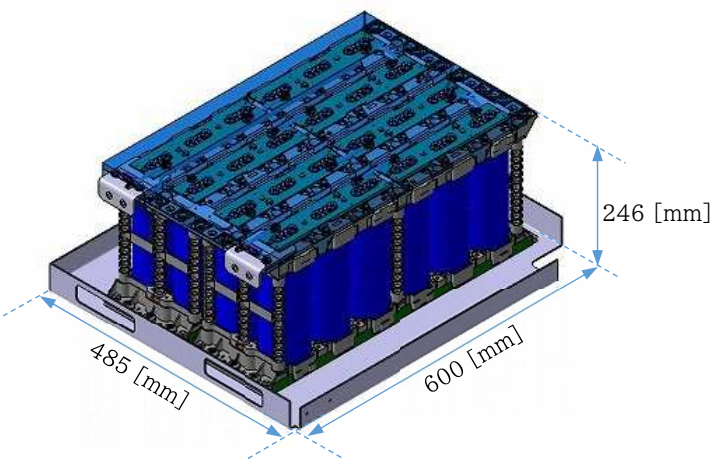
Nippon Chemi-Con Corporation
July 14, 2023

Supercapacitor Module for Use in Large-Scale Equipment

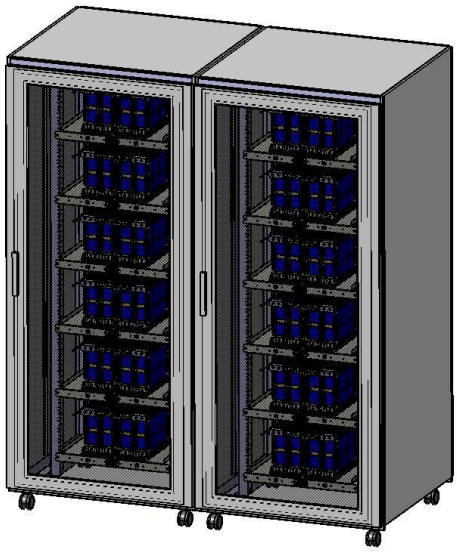
Nippon Chemi-Con has developed a supercapacitor module for high-voltage and large-current applications. This product is characterized by the use of a capacitor cell that achieves low resistance and large capacitance (2.8V-3150F) (see*) to provide a module suitable for large current applications. Also, a high-voltage system can be easily constructed by using a package with 24 cells connected in series.
This module can also be used in series and parallel connections and can support up to 800V. (When 12 modules are connected in series)
The shape of this module is designed to be stored in 19-inch racks, which are easy to obtain and come in numerous variations. We can provide configurations optimized for various parameters.
Furthermore, the module is equipped with a voltage balance circuit to maintain uniform conditions for each cell and sensors for detecting overvoltage and overheating. This module is designed to operate safely in large-scale power storage systems requiring high reliability.
*DDXF2R8LGM3B2EDH2S

Specifications

Rated voltage	67.2 [V]
Connected max voltage	800 [V]
Max allowed current	5,000 [A] (Per module)
Capacitance	131 [F]+20%/ -0%
DC internal resistance	12[mΩ] or lower
Outer size	W 485×D 600×H 246 [mm]
Mass	30 [kg]
Safety design	Overvoltage sensor, overheating detector (thermostat), cell voltage balance circuit



<Example applications>
Output stabilizer in renewable energy power generation system
Voltage drop compensators for factory equipment
Peak assist for large-current manufacturing equipment



Rack configuration example (12 modules, 800V)

Samples and Mass Production

-Samples: July 2023
-Mass production: October 2023

Production Site

-Supercapacitor: Chemi-Con Yamagata Corp. Yonezawa Plant
-Module: Chemi-Con Nagaoka Corp.