



# Stackable Supercapacitor

Powered by FoR-Energy

supports the entire power system from power generation to transmission, transformation, distribution as well as customers

**With a new scalable graphene derivative, we created hybrid supercapacitors that can store comparable energy to batteries while also offering superior rapid charging capabilities.**



Grid Services including demand response, peak shaving, load leveling,



Solar and wind farms intermittency and curtailment management

**Charge and discharge stage:**

- Fast charging and discharging from 0.3 to 10C, lithium batteries up to 0.5C and up to 2C for more expensive versions.
- DOC 100%, DOD 100% (95%, BMS related) without reducing life expectancy <> Lithium batteries up to 80%.

**Life expectancy:**

- Over 32,000 cycles (50,000 and more possible) <> For lithium batteries 6,000 cycles (up to 10,000 possible in more expensive versions).

**Fire protection:**

- No fire risk. The graphene in the supercapacitor battery removes the oxygen in the event of a fire and thus prevents the lithium from burning.

**PERFORMANCE SPECIFICATIONS**

Total Energy	6.14Kwh/120Ah
Usage Energy	5.83Kwh
Nominal Voltage	51.2V
Charging current	100A
Discharging current	100A
Cycle life	20000 times
Temp range/Discharging	-30~55°C
Temp range/Charging	0~55°C
Storage humidity	5~95%
Communication port	CAN
WIFI	Yes
Dimension	730*550*133mm
Weight	Weight



**Optional Capacity**

Model	Configuration	Nominal voltage	Capacity
SM-12	1 Secondary module+ 1 Main module	102.4V	12Kwh
SM-18	2 Secondary modules+ 1 Main module	153.6V	18Kwh
SM-24	3 Secondary modules+ 1 Main module	204.8V	24Kwh
SM-30	4 Secondary modules+ 1 Main module	256.0V	30Kwh
SM-36	5 Secondary modules+ 1 Main module	307.2V	36Kwh
SM-42	6 Secondary modules+ 1 Main module	358.4V	42Kwh
SM-48	7 Secondary modules+ 1 Main module	409.6V	48Kwh