

**CARBON BASED**POWER CAPACITORS



www.kurt.energy

Hybrid vehicles application



Extreme temperature, lifetime and power requirements



## Power, safety and lifetime like a supercap.



Lithium-ion battery cells	Hybrid Carbon-based Power Capacitors
Fire risk	NO fire risk
Complex to use	Simple and robust; NO BMS needed
Active cooling/heating	NO need for active thermal management
Short time limited power	Sustained high power capability (up to 20x)
Energy, 60 to 80 % usable	Energy, 100% usable
Limited temperature range	Works from -40°C to +80°C
Fast charging is problematic	Fast charging in 5-10 min
Lifetime too short	1 million km or 20 years and more
Sustainable?	10 to 20X lower environmental footprint
Cost efficient	Lowest cycle life cost
Many announcements	In production since 2 years

## Register for our new on-line Battery Builder (a powercapacitor battery load simulator)



Altreonic-Kurt.energy's in-house developed Battery Builder has proven to be a very helpful tool for configuring a power capacitor battery before it is actually built. With as input a load profile and a selected reference battery, we can simulate the battery load over the given profile and deduct calendar lifetime parameters taking into account the actual load, the temperature profile, and how the battery will be used.

Kurt.energy is now releasing it as an on-line version that registered developers can use to submit their own load profile. The simulator is accessed through a standard browser. Each registered user will have its own private repository for his projects with the output generated in a pdf file.

To apply the simulator to your specific application, contact us and become a beta-user. Candidates will receive an invitation code.

Register here: <u>kurt.energy request and contact page</u>

For more information, visit <a href="https://kurt.energy/power-capacitor-battery-load-simulator/">https://kurt.energy/power-capacitor-battery-load-simulator/</a>











