

Global technology leader in ultracapacitor energy storage



Skeleton Technologies helps to save energy. We do it with our market-leading ultracapacitors, ultracapacitor modules, and full energy storage systems. Our technology enables companies to reach significant energy savings in a wide variety of industries ranging from automotive, transportation, and maritime, all the way to renewable energy, power grids, industrial applications, and aerospace.

Our competitive advantage is “curved graphene”, our proprietary carbon material, which is the basis for all our products. It provides our cells, modules, and systems with four times the power density and twice the energy density compared to similar products on the market.

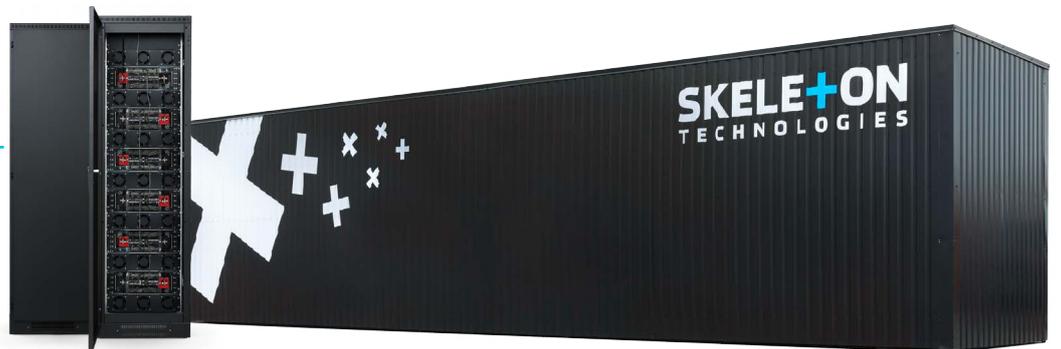
SkelCap
industrial ultracapacitor cells



SkelMod
ultracapacitor modules



SkelGrid
full energy storage systems



MILESTONES

- 2009**
Skeleton Technologies founded
- 2010**
First prototype
- 2011**
Signed European Space Agency as customer
- 2012**
First commercial product series launched
- 2013**
First full system delivered
- 2014**
New manufacturing facility opened in Viimsi, Estonia
- 2015**
First modules launched
- 2016**
Expansion of Viimsi production facility
- 2017**
German manufacturing facility opening

CUSTOMER NEEDS THAT SKELETON TECHNOLOGIES CAN SOLVE

1 Lower cost, longer lifetime, and higher reliability for energy storage

2 Increased performance, decreased weight and volume in mobile systems

3 Meeting CO2 emission regulation targets, saving fuel in automotive and transportation, meeting power quality regulations in renewable energy and smart power grids.

FUNDING

Skeleton Technologies has raised 41,7 m€ in funding from investors.

FIRSTFLOOR CAPITAL



up invest



What are ultracapacitors?

Ultracapacitors are energy storage devices with high power density, long lifetime (10+ years), and high reliability. One of the main benefits of ultracapacitors is the ability to charge and discharge extremely quickly.

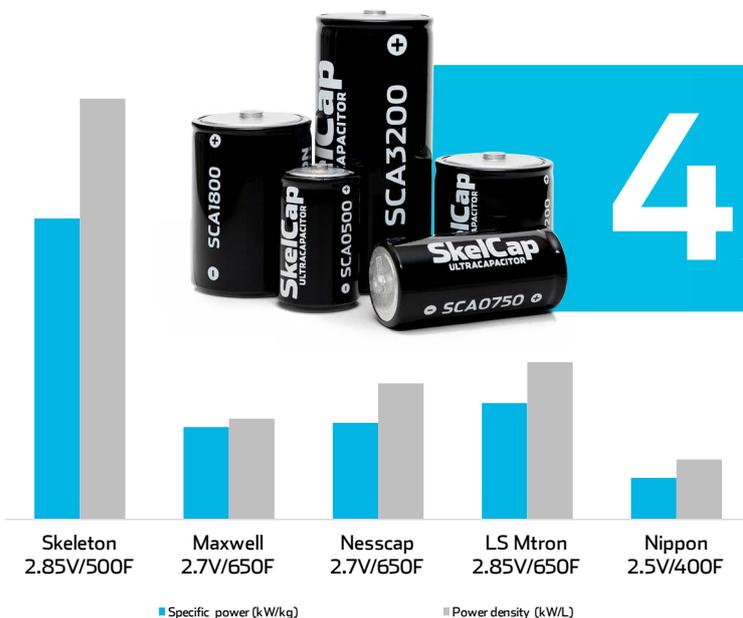
Will ultracapacitors replace batteries?

Ultracapacitors are known as fast energy storage, and batteries are known as slow energy storage. They are not competing technologies, and can be used together so that the main benefits of each technology are used for their ideal application.

How do ultracapacitors differ from batteries?

Ultracapacitors store energy in an electric field, whereas batteries store energy in a chemical reaction. This means that batteries charge and discharge slowly, and can operate for a long time, but with low current. Ultracapacitors have a lifetime 500 times that of current lithium-ion batteries, and have an extremely high power output. Ultracapacitors also work close to full efficiency in even extreme temperatures (-40°C to +70°C).

COMPETITIVE ADVANTAGE



4x POWER DENSITY VS COMPETITION

Lower internal resistance and 4x higher power density achieved in cost-efficient product design

*Based on IEC62391-1B