skeleton⁺

40% more flops from the same GPU

with Skeleton's GrapheneGPU peak shaving solution with a 10µs reaction time

The GrapheneGPU is a peak shaving solution designed specifically for AI data centers. The combination of Skeleton's best-in-class SkelCap SCA0300 EVO supercapacitor cells together with a state-of-the-art DCDC converter and custom software, offer unmatched performance, providing clear advantages over competing CBU shelves:
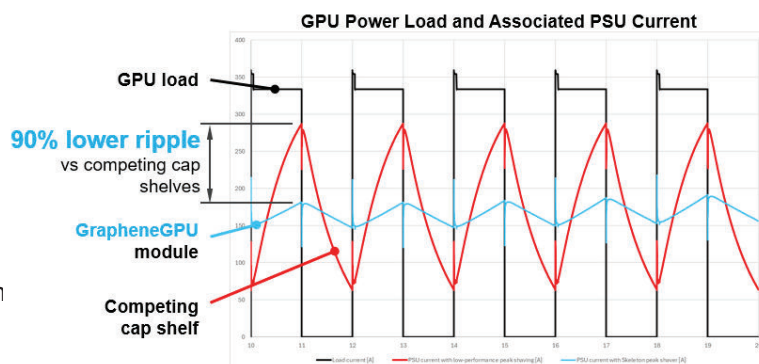

- **Grid connection reduced by up to 44%** due to the peak shaving capabilities of the GrapheneGPU

- **Energy consumption cut by up to 45%** due to dummy (empty) loads being eliminated and efficiency improved

- **GPU performance gains of up to 40%** as GrapheneGPU allows the GPUs to operate at their full capacity by **eliminating thermal de-rating**

GrapheneGPU PCS 50
Peak Shaving Capacitor Shelf (PCS)

- 48 VDC interface voltage
- 80 kW peak power
- ORV3 compatible, 1OU high
- Air- or liquid-cooled
- Intelligent control and integrated BMS
- Lithium-free supercapacitor energy storage based on Skeleton's patented Curved Graphene technology

GPU Power Load and Associated PSU Current

GPU load

90% lower ripple vs competing cap shelves

GrapheneGPU module

Competing cap shelf

Skeleton Technologies is building the largest supercapacitor factory in the world: production capacity of 30 million cells a year

Skeleton is a qualified supplier of high-power energy storage solutions to some of the largest companies globally and adheres to the highest quality standards, including the automotive IATF 16949.

- Benefit from the highest reliability in the industry: **millions of units in the field** in passenger car applications without failures.
- Working with the aerospace industry since 2013, **series deliveries to mission-critical industries since 2017**.
- Work with the largest AI peak shaving engineering team globally: **50+ engineers dedicated for data center-specific solutions.**