



Novac was born in 2020 in **Modena**, in the heart of the
italian **Motor Valley**

With our know-how in energy storage materials
we develop
high-performance supercapacitors





Batteries
(Marathon Runner)



Supercaps
(Sprinter)



Value Proposition



Partnering with our customers to optimize energy storage efficiency by:



- **Increasing durability** – Extending energy storage system lifespan



- **Enhancing power performance** – Delivering instant energy for peak demands.



- **Lowering total cost of ownership** – Cutting maintenance and replacement costs.

Addressable problems



Battery oversizing



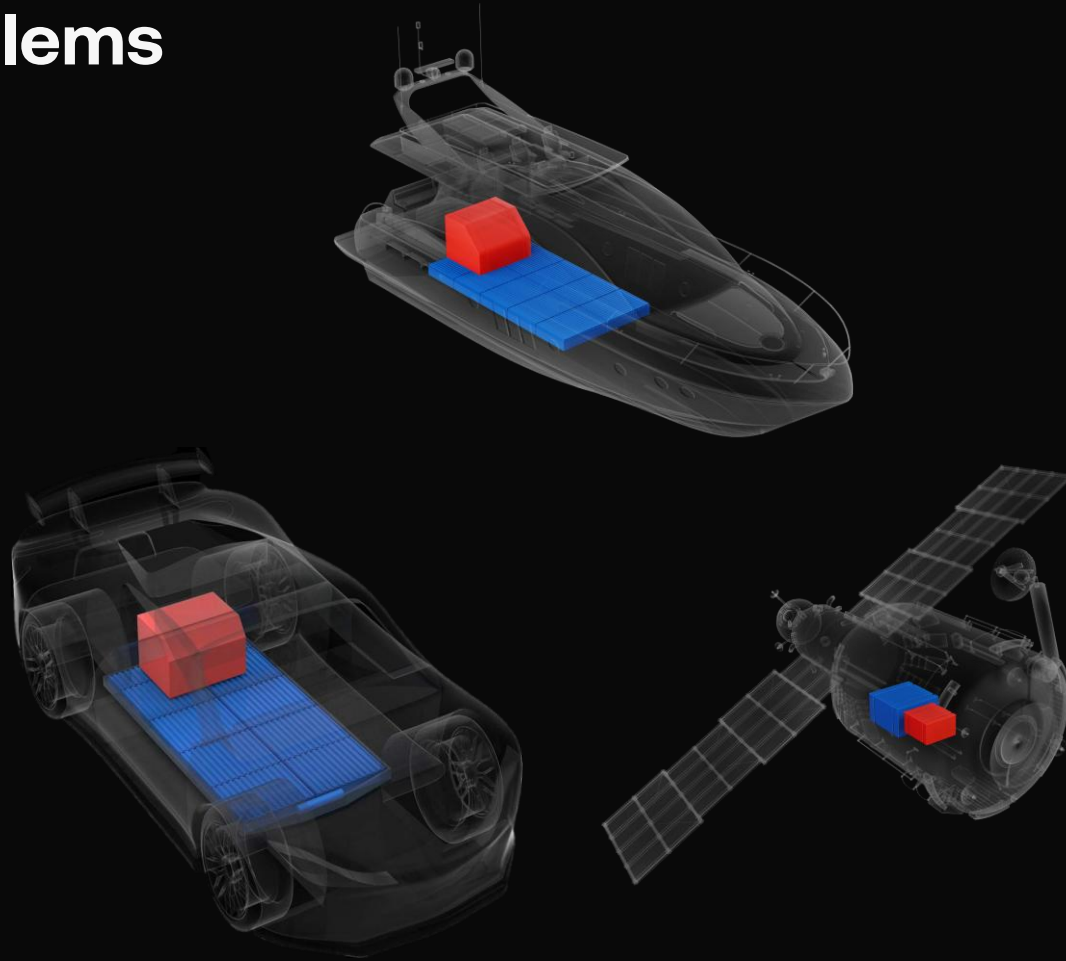
Short life-cycle in stressful conditions



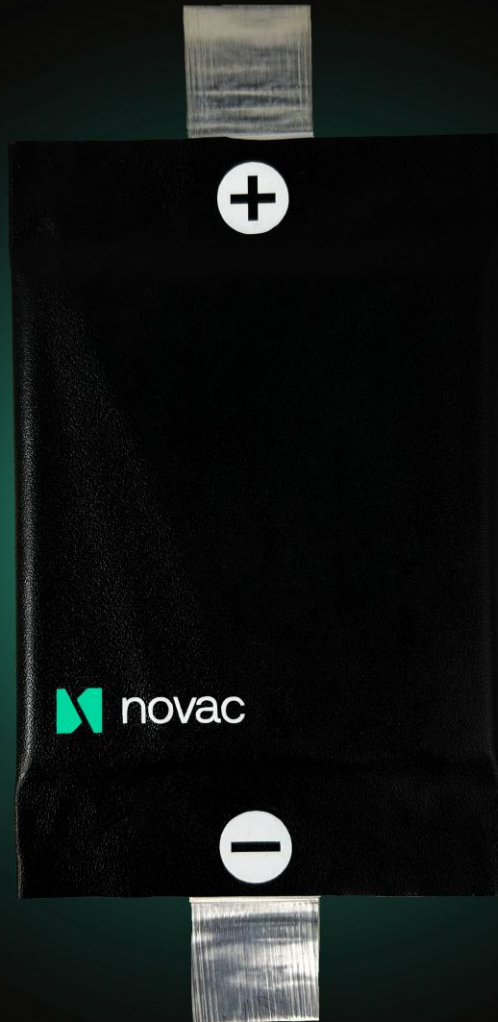
Low operative temperature range



Low volume availability



Solution: Novac Pouch Supercapacitors



Safe
No fire risk



Long lasting
100x than batteries

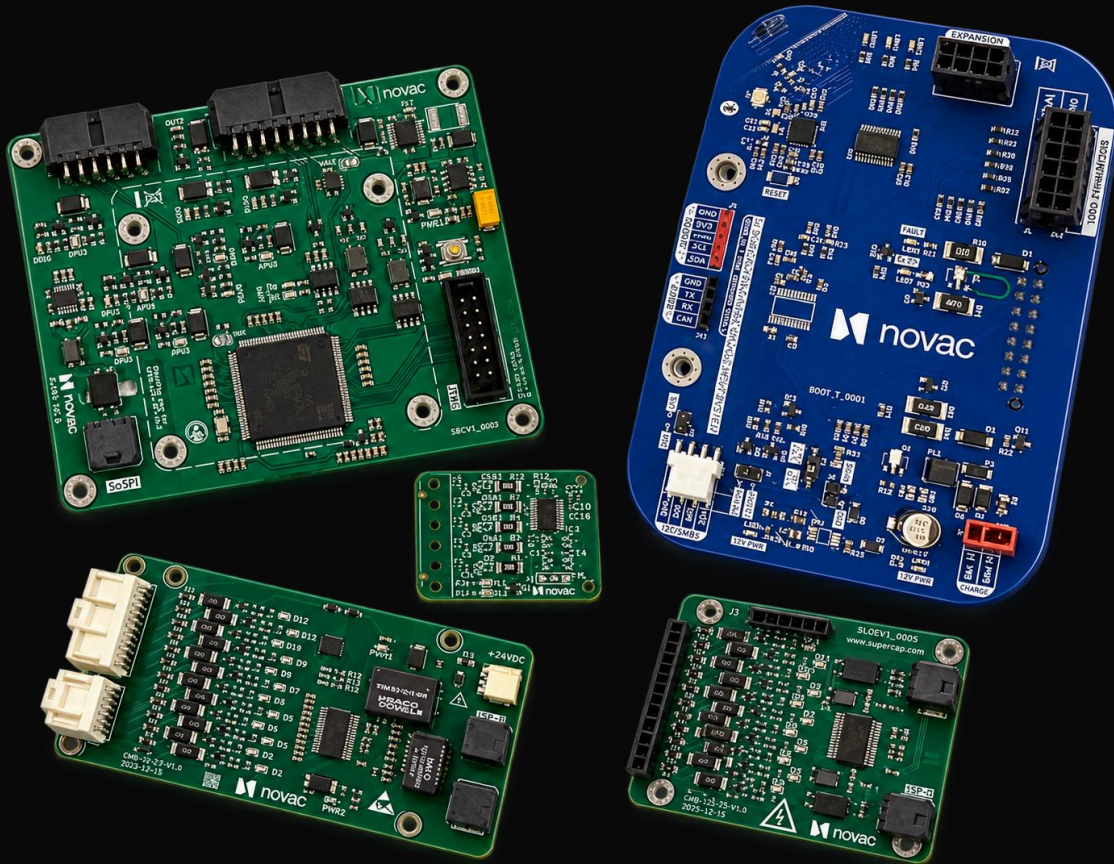


Sustainable
Critical Raw Materials Free



Thin & Light
-50% volume and weight

Custom electronics



- Custom electronics for **Supercapacitor Monitoring Systems**, ranging from analog to digital architectures
- With or without **communication protocols** (CAN, LIN, RS485)
- **Modular master/slave configuration** allows for **scalable** voltage systems tailored to diverse application needs.

Innovation Village Award



Winner of “Innovation Village Award 2025” and “Bosch Engineering”

Applications



Automotive & Motorsport

- Regenerative Braking
- Active Suspensions
- Torque filling
- Power steering



Maritime

- Harbor Maneuvers
- Regenerative Braking
- Backup power
- Stabilization



Aerospace

- SAR Satellites
- Launchers
- Deployment Systems
- Solar Arrays Movement



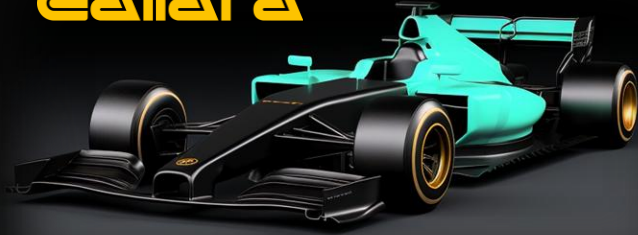
Industrial

- Datacenters
- Intralogistics
- Grids
- UPSs

Traction



dallara

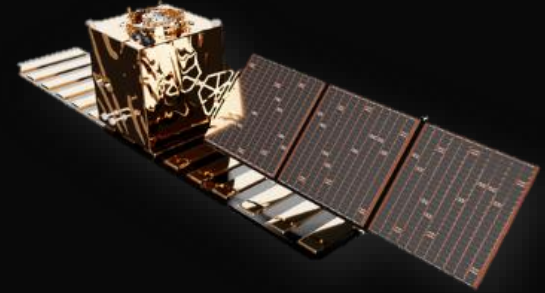


Motorsport

IVECO



Commercial vehicles



Aerospace



Automotive



Defense



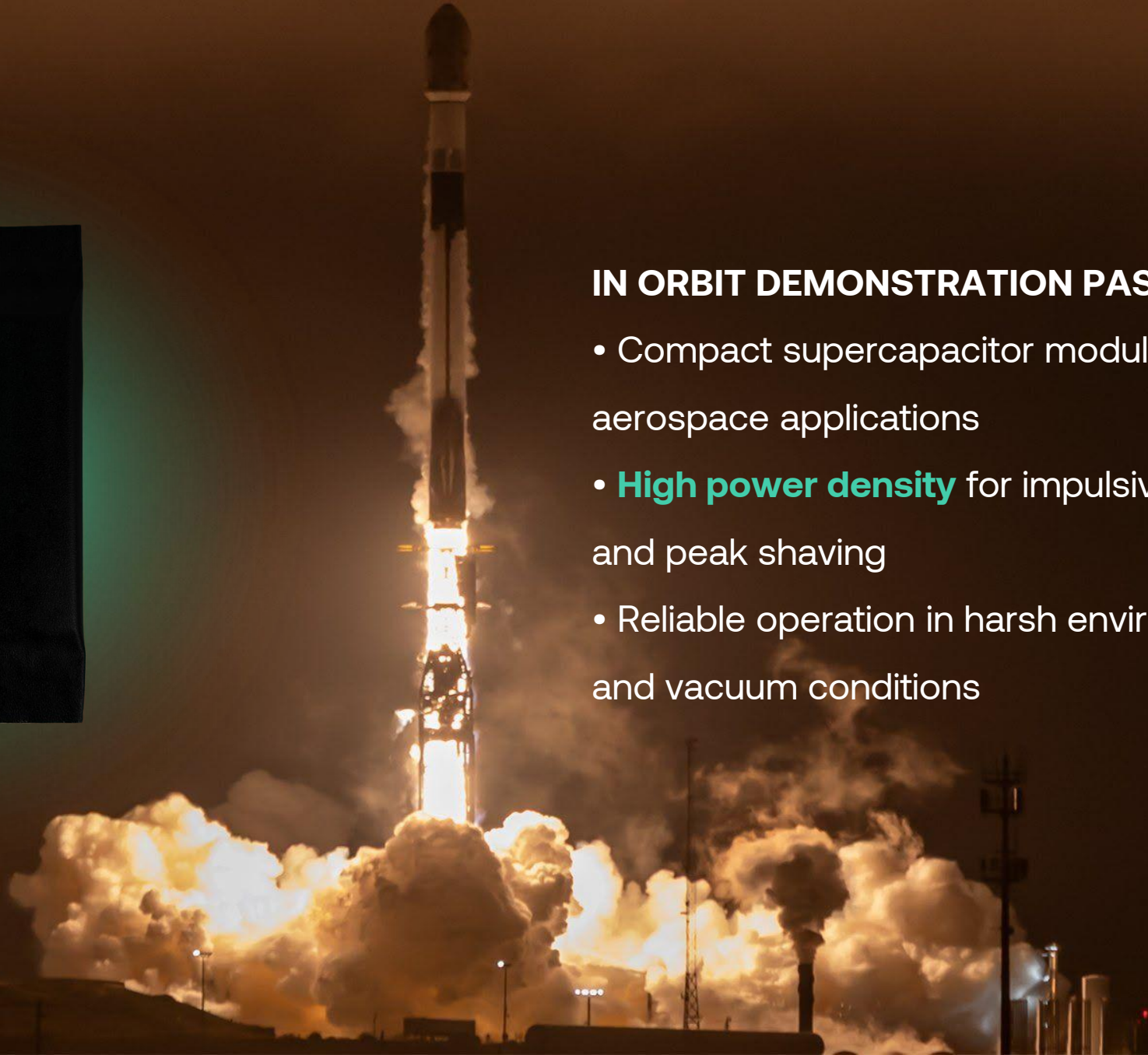
Logistics

Aerospace



IN ORBIT DEMONSTRATION PASSED

- Compact supercapacitor module for aerospace applications
- **High power density** for impulsive loads and peak shaving
- Reliable operation in harsh environments and vacuum conditions





Supporting high-power stationary applications

- Compact **rack-mounted** supercapacitor system for stationary energy storage applications
- Modular architecture designed for reliable integration into industrial and energy systems

Status

- Rack-mounted prototype currently under validation with 1 customer

Capabilities



Cell Chemistry Design

Know-How in characterization and development of cell chemistries for both batteries and supercapacitors



Supercapacitors'

Manufacturing

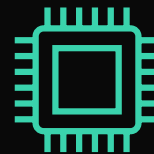
High-Performance Custom Supercapacitors supply



Energy Storage Systems

Design and Simulations

Utilizing a proprietary simulation tool to accurately assess and size hybrid energy storage systems



Custom electronics

development

Balancing and management systems developed to fit the specific project needs

Team – 18 Members



X6 Materials R&D

X9 Engineering & Production

X3 Overheads



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