

ELECTROCHEMICAL CAPACITORS are energy storage devices known for high power density. They have exceptionally long cycle life, can be rapidly charged and discharged, and are very durable. However, these devices perform poorly at low temperatures and contain flammable, toxic chemicals.

South 8 Technologies, Inc. has developed a breakthrough Electrochemical Capacitor technology which differs sharply from conventional chemistries. Our novel, patented electrolyte allows for a *substantial* improvement in performance at low temperatures and safety while leveraging conventional low-cost materials.

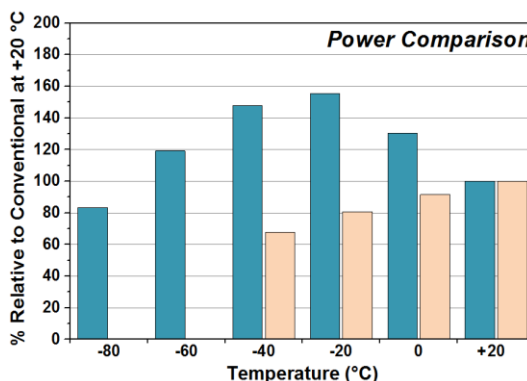
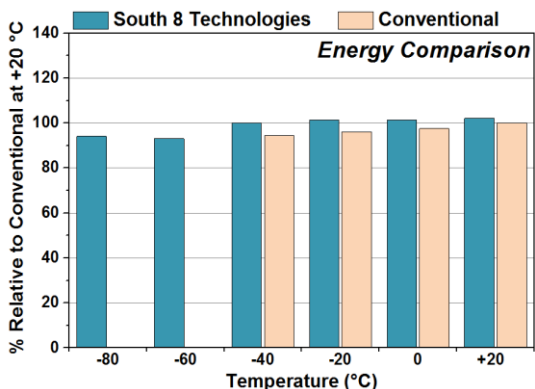
APPLICATIONS

- High-Atmosphere Drones
- Aerospace
- Military
- Wind Turbines
- Hybrid Vehicles
- Industrial Equipment
- Engine Start-Stop, Cold-Start

Device temperature performance has been third-party validated by the National Renewable Energy Laboratory (NREL)



18650-Type Form Factor, Actual Size Shown



Technology Factor	South 8 Technologies	Competition	Our Advantage
Operating Temperature	-80 °C to +65 °C	-40 °C to +65 °C	New markets in high atmosphere, aerospace, military, cold weather
Safety	Low Flammability, Non-Toxic	High Flammability, Toxic	Increased use in automotive and military applications
Power	Exceptionally High Performance to -80 °C	Steadily Drops at Low Temperature	Enables pulse power and recharge at exceptionally low temperatures
Energy Density	7 Wh/kg	7 Wh/kg	No loss in energy density
Life & Voltage	1,500 hours at 3.0 V and +65 °C	1,500 hours at 3.0 V and +65 °C	Component swap-out in existing systems, no voltage de-rating required