



SOLID ENERGIES INC.

Battery Pack Design & Prototyping Services

www.solidenergies.com

BATTERY PACK PROTOTYPING PROCESS FLOW

1 Cell* Grading & Sorting



2 Holder & Busbar Assembly;
Module Stacking / Clamping



3 Spot, Wire-Bond or
Ultrasonic Welding



4 BMS, Wiring & Thermal
Integration



5 Enclosure & Pack Testing

*Pouch or cylindrical cells

REPRESENTATIVE MODULE & PACK PRODUCTS



Cell Modules
(Series / Parallel)



Low-Voltage Packs
(12 / 24 / 48 V)



High-Voltage Packs
(≥ 400 V)



Rack-Mount BESS
Modules



Custom Form-Factor
Prototype Packs

TYPICAL APPLICATIONS



Grid & Commercial
Energy Storage



Electric Vehicles
& e-Mobility



Defense &
Portable Power



Aerospace &
UAV / Drone



Industrial &
Robotics

WHY SEI

- Advanced Li-ion battery developer: 10+ patents; research funding from the U.S. DoD, DOE, NASA and the CEC.
- Integrated cell-to-pack approach: cell expertise guides pack design and testing, with multi-channel testing and an ML-enabled data pipeline.
- R&D lab and pilot production line in Anaheim, California: assembly, formation and qualification under one roof.

From cell selection to pack integration — module, pack, and BESS design, prototyping, and validation

Contact: contact@solidenergies.com · (714) 770-0064 · www.solidenergies.com



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PACK & SYSTEM PROTOTYPES

Solid Master Battery Product Line

Solid-State Drone Battery Packs (22–48 V)

- 22, 24, 44, 48 V; 30–40 Ah; 660–1,760 Wh
- ~330–345 Wh/kg (22 V and 44 V packs)
- 120 A cont. / 400 A peak; 500+ cycles

California Energy Commission:EPC-21-039

5 kWh Solid-state Cell Based Energy Storage System

- 48 V / 104 Ah unit built from SEI SSLiB cells
- Integrated BMS, hybrid solar inverter and PV panels
- Path to modular 51.2 V Packs for C&I BESS

Custom Pack Engineering

Packs Built to Your Specification

- Voltage, capacity, connectors, enclosure
- BMS with CAN / SMBus / RS485
- Thermal management and thermal modeling
- Pack testing; UN 38.3 via accredited labs

PACK PROTOTYPE OPTIONS

- Drone / UAV packs: 22–48 V, 30–40 Ah (Solid Master line)
- Energy storage: 48 V / 104 Ah (5 kWh) SSLiB unit
- Custom packs: BMS, harness, connectors, enclosure
- Formats: cylindrical and pouch cells; 12–48 V to ≥ 400 V

BATTERY PACK PROTOTYPES



6T Battery (24V/104Ah)



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