

High current capability (2.75C) under continuous full discharge



L.Pack Lithium-ion Battery 48VDC – 42Ah – 2kWh

No Oversizing, No Overheating. Just Maximum Power. This test confirms L.Pack's ability to sustain continuous discharge currents of up to 110A (2.75C) from a single module—delivering a full discharge in just 20 minutes without overheating. Powered by Calogy's proprietary Uni.T™ thermal management technology, the module maintained safe operating conditions with internal temperature variation under 4°C, ensuring reliability and long lifetime. With L.Pack, there's no need to oversize your battery for demanding duty cycles—making it the ideal solution for non-road mobile machinery in tough industrial environments or recreational vehicles pushed to their limits. Work hard. Play hard. Powered by Calogy.

Objectives

- Demonstrate the maximum continuous discharge current: Full pack discharging below 55°C.
- Measure the pack temperature non-uniformity under intense continuous discharge.

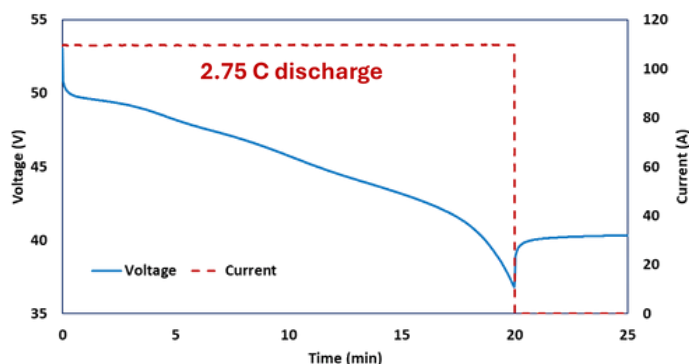
Test conditions

Current Profile

- Constant current discharge at 110A (2.75C)

Test Conditions

- initial and ambient temperatures: 20°C
- Initial SOC: 97% - Final SOC: 7% (DoD 90%)
- Safe cell temperature: Below 60°C
- Maximum cell temperature target: 55°C



Results and conclusions

- Continuous high power demonstrated with full discharge (DoD 90%) at 2.75C, emptying the battery in 20 min.
- Battery temperature remains in the safe operating zone after an intense full discharge.
- Pack temperature non-uniformity is less than 4°C, demonstrating exceptional thermal management for enhanced lifetime.

