



CALOGY

High Power Applications: Repeated 7C Pulses (300A)

Lithium-ion Battery 48VDC – 42Ah – 2kWh

Maximum Power without overheating

High-power cycles push most batteries to the brink—causing overheating, thermal runaway risks, and long downtimes for cooling. Not Calogy's L.Pack battery! Powered by **Uni.T™**, our **proprietary thermal management system**, the test confirms that a single L.Pack module can deliver **up to 300A** repeatedly using **only air cooling**—making it **safer** and **far less complex** to operate than liquid-cooled alternatives. **No need to oversize for power**. But if you need even more power, simply **stack multiple modules** for higher voltage or current. This **extreme power** combined with **ease of integration** makes it the ideal solution for **demanding industrial auxiliary equipment** such as aerial lifts, cranes, towing platforms or other machinery. **Dare us.**



Objectives

- Demonstrate Calogy's L.Pack battery safely sustains repeated high power pulses with air cooling, thanks to Uni.T

Test conditions

Current Profile:

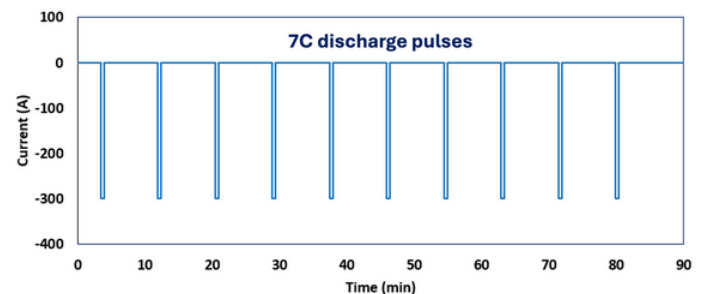
- Pulse intensity: 300A discharge (7C) for a duration of 30 seconds
- Resting Time between each pulse: 8 minutes

Test Conditions:

- Ambient temperature: 20°C

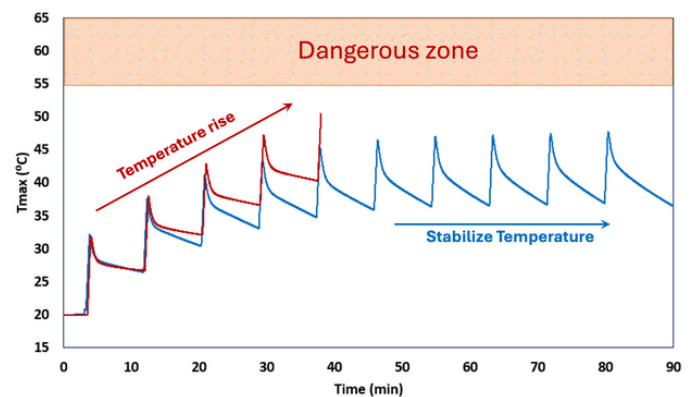
Thermal Management Conditions:

2 tests were carried out using 1 battery module containing Uni.T, Calogy's thermal management technology. The first with the fan turned on (**cooling activated**), allowing the heat to be expelled. The second with the fan turned off (**cooling deactivated**).



Results and conclusions

- **Cooling activated:** The cell temperature is **stabilized** below a dangerous zone (full discharge is possible).
- **Cooling deactivated:** the cell temperature **rises continuously**.
 - ➡ Safety required the test to be terminated when the cell temperature reaches 50°C.



Temperature Profile