

IBC - Isothermal Battery Calorimeter



New From THT Battery Calorimeter

Study battery...

- Stability
- Performance
- Efficiency
- Life cycle

Quantify heat release under...

- Applied load conditions (mW to W)
- On the shelf conditions (μ W to mW)

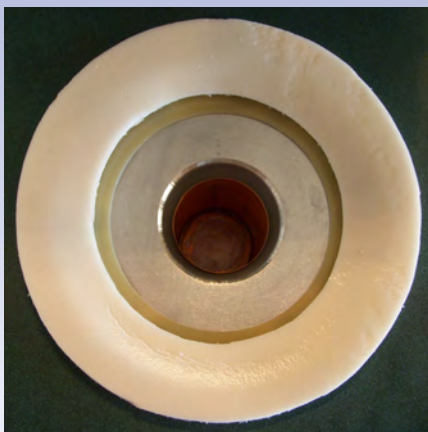
Measure change of heat release with...

- Chemistry modification
- Size and shape
- Environmental temperature
- Applied load
- State of charge
- Age



FEATURES

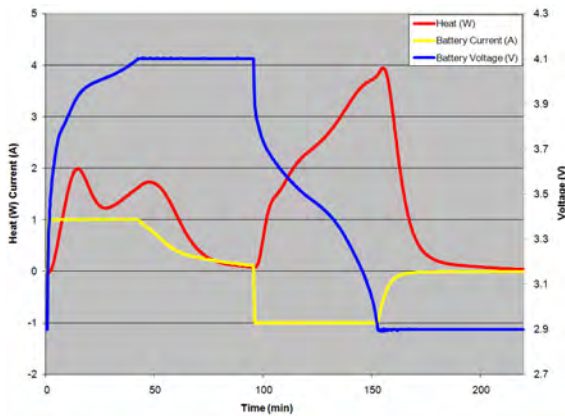
- Accurate heat measurement down to 1μ W over wide temperature range
- Wide dynamic range up to 10W
- Flexible sample chamber, coin cell to D size
- Small footprint, no ancillary cooling equipment required
- Windows based control software, USB connection
- Measure voltage, apply load during test



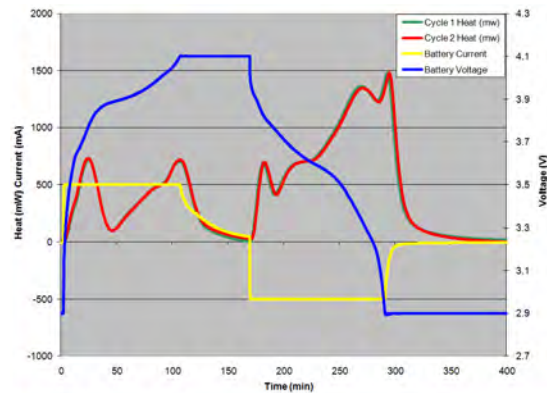
thermal hazard technology

NOVEL RAPID SENSITIVE VERSATILE INEXPENSIVE

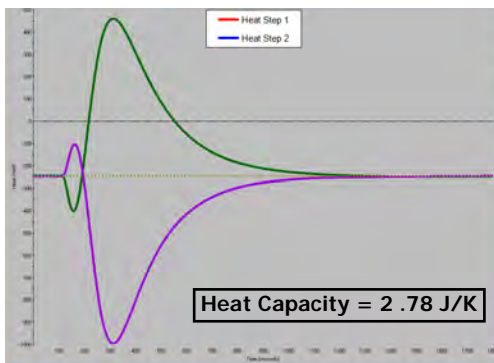
IBC - Isothermal Battery Calorimeter



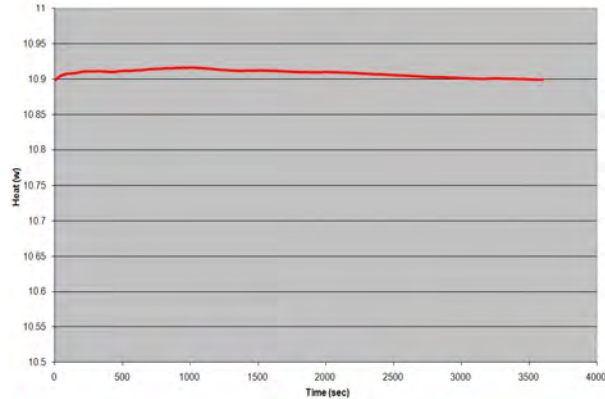
1.5 AH Lithium Battery Charge and Discharge Cycle 1A



1.5 AH Lithium Ion Prismatic Cell Charge and Discharge Cycle (500 mA)



Heat Capacity of Lithium CR2032 Coin Cell



10.9 Watt Steady State 35°C

Battery sizes	coin cell to D size
Temperature range	-5 to 80°C
Current range options	100µA to 4A (Standard) or 10µA to 100mA (high sensitivity)
Minimum detectable heat	+/- 100µW (Standard) or +/- 1µW (high sensitivity)
Maximum detectable heat	up to 10W
Battery cycler	0 - 4A charge / 0 - 10A discharge; 1mA resolution (Standard) 0 - 1A charge / 0 - 1A discharge; 10µA resolution (high sensitivity)
Charge/Discharge battery during test	✓
Apply load during test	✓
Measure voltage during test	✓
Connection to PC	via USB

Head Office
1 North House • Bond Avenue • Bletchley • MK1 1SW • England
T: +44 1908 646800 F: +44 1908 645209 E: info@thtuk.com W: www.thtuk.com

US Office
Suite B201a • 100 Jersey Avenue • New Brunswick • NJ 08901
T: +1 732 545 4600 F: +1 732 545 4601 E: info@thtusa.com W: www.thtusa.com

Asia Office
Suite 1416 • No 1101 Pu Dong Road (S) • Shanghai 200 120
T: +86 21 5836 2582 F: +86 21 5836 2581 E: info@thtchina.com W www.thtchina.com

