

μ RC micro Reaction Calorimeter



Titration
calorimetry,
isothermal
calorimetry
and differential
scanning
calorimetry
- all in one
instrument

FEATURES

- Low volume disposable cells for solids, liquids and mixtures
- High sensitivity/wide dynamic range - biologicals to explosives
- Quick response mode for kinetic applications
- Pressure measurement up to 10 bar for monitoring catalysis/hydrogenation
- Solid addition for accurate dissolution studies

APPLICATIONS

- ✓ Heat of reaction
- ✓ Heat of dissolution
- ✓ Heat of crystallisation
- ✓ Hydration studies
- ✓ Thermal stability
- ✓ Heat capacity determination
- ✓ Reaction kinetics
- ✓ Excipient compatibility
- ✓ Carbon capture
- ✓ Food spoilage
- ✓ Microbial growth
- ✓ Protein denaturation

thermal hazard technology

NOVEL RAPID SENSITIVE VERSATILE INEXPENSIVE

μ RC micro Reaction Calorimeter



μ RC specification

Baseline Noise	From 5 μ W
Dynamic Range	5 μ W to 600mW
Temperature Range	-5°C to 170°C
Modes of Operation	Isothermal Titration Scanning Pressure (up to 10 bar) Solid Addition
Scanning Rate	Up to 2°C/min
Isothermal Stability	+/- 0.0001°C over extended time period
Cell Volume	1.5 ml
Cell Type	Removable glass vial
Time Constant	20 seconds
Injection Volume	1 to 500 μ l
Temperature Control	Peltier based (no external cooling)
Stirring Speed	0 – 400 rpm
Measurement Principle	Power compensation
Connection to PC	via USB cable
Footprint (width x depth x height)	15 x 40 x 35 cm

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 Mid West Office

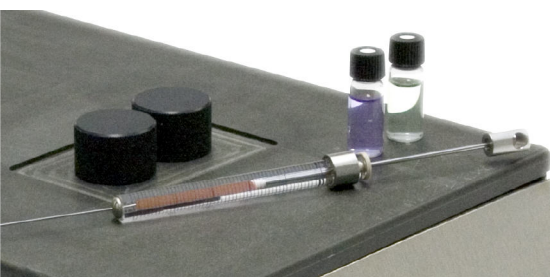
49 Boone Village #130 • Zionsville • Indiana • 46077 • USA
T: +1 317 222 1904 F: +1 317 660 2092 E: info@thtusa.com W: www.thtusa.com

Asia Office

Room 1115 • Lane 775 No.1 Si Ping Road • Shanghai • 200 092 • China
T: +86 21 5836 2582 F: +86 21 5836 2581 E: info@thtchina.com W: www.thtchina.com

India Office

808, Eighth Floor, Tower 1 • Pearl Omaxe, Netaji Subhash • Place PitamPura • Delhi 110034 • India
T: +91 9560 655656 F: +91 7838 515146 W: www.thtindia.com



thermal hazard technology