

## TAM IV From TA Instruments

The new **TAM IV** is the world's most sensitive, stable, and flexible microcalorimeter system. It is completely modular and combines the highest heat flow sensitivity with unmatched long-term temperature stability to measure processes that are undetectable by other techniques.



### Features and Benefits

- New and more responsive temperature control provides rapid thermal equilibration and extended temperature range of 4 °C to 150 °C for real-world cold storage applications.
- New plug-and-play calorimeters for fast and easy installation
- New Accessory Interface box with capacity for up to eight modules
- New module for interfacing up to three independent probes/sources such as pH-probe or light source
- New features in TAM Assistant instrument control, data acquisition and data analysis software

The TAM IV provides unmatched flexibility for analyzing a wide variety of sample formats and sizes:

- Biologicals & Pharmaceuticals
- Material Science
- Food
- Energetics (batteries, explosives & propellants)
- Environmental (water & soil) samples

The power and flexibility of the TAM IV thermostat, coupled with the available calorimeters and accessories creates a wide array of experimental capabilities suitable for any laboratory and offering performance and sample throughput that is unmatched by any other isothermal calorimetry instrument.



## TAM IV Specifications

### THERMOSTAT SPECIFICATIONS

Thermal Media	Oil
Calorimeter Positions	1 - 4
Temperature Range	4 to 150 °C
Accuracy	< ± 0.1 °C
Long Term Stability	< ± 100 µ°C/24h
Scanning Rate	≤ ± 2 °C/h

### CALORIMETER SPECIFICATIONS\*

CALORIMETER	SHORT TERM NOISE	BASELINE DRIFT	ACCURACY	PRECISION
Nanocalorimeter	< ± 10 nW	< 40 nW/24 h	< 2%	± 100 nW
Minicalorimeter / Multi 4mL	< ± 100 nW	< 200 nW/24 h	< 5%	± 200 nW
Microcalorimeter 20mL	< ± 100 nW	< 200 nW/24 h	< 2%	± 100 nW
Minicalorimeter/Multi 20 mL	< ± 300 nW	< 1 µW/24 h	< 5%	± 300 nW
Macrocalorimeter	< ± 500 nW	< 6 µW/24 h	< 5%	± 3 µW
<b>DETECTABILITY</b>				
Solution Calorimeter**	< ± 10 µ°C	1 - 4 mJ	< 0.1%	Q>100 J:0.02% Q<50 J:< ± 10 mJ Q<0.1 J:< ± 5 mJ

\*Isothermal Operation

\*\*Temperature Range 15-80 °C

For more information on the TAM IV configurations available for your application, or to receive a quote for the TAM IV microcalorimetry system, go to [www.tainstruments.com](http://www.tainstruments.com), or contact your local TA Instruments Sales Representative.