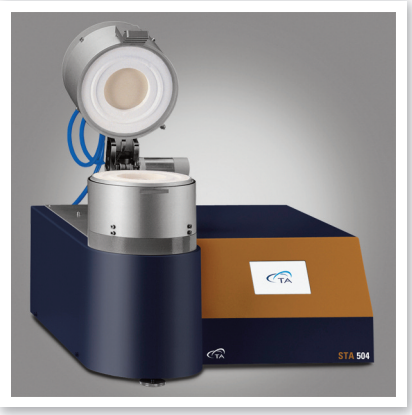
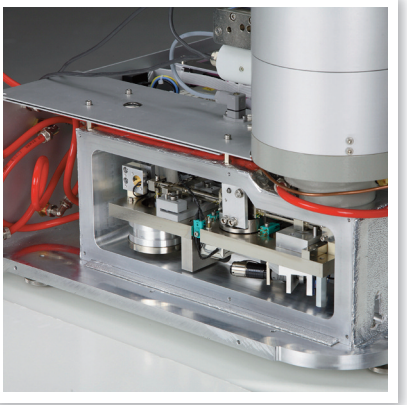
STA 504 SIMULTANEOUS THERMAL ANALYZER



The STA 504 provides simultaneous measurement of weight change (TGA) and heat flow (DSC) on a sample from -160°C to 1650°C. The STA504 features a vertical balance design that is free from errors associated with uncompensated beam growth. DSC heat flow data is dynamically normalized using the instantaneous sample weight at any given temperature.

Instrument Design

The design of the STA 504 is extremely flexible, allowing for the measurement of many sample types under myriad experimental conditions. The system is vacuum-tight and supports experiments performed under air, inert gas, reactive gases, or vacuum. TGA measurements can be performed on large samples, up to 1 g and 70 mm diameter. This is particularly useful for the evaluation of parts as produced, or composite samples that may have poor spatial homogeneity. The widely divergent types of samples used in the STA 504 require that multiple sensors be available. These sensors are easily interchanged with a simple plug interface; total changeover time is less than one minute.



STA 504 Technical Specifications

Sample Weight	1g
Tare	1g
Weighing Range	250mg or 1g
Resolution	ΔG=0.5 µg, T=0.05°C, ΔT=0.01°C
Noise	1µg
Atmosphere	Vacuum, inert gas, air
Temperature Range	RT – 1500°C, 100°C – 1650°C -160°C – 500°C, RT – 1000°C
Heating Rate	0.01 – 100°C/min
Cooling Rate	1500°C to 100°C in 15 min

- Simultaneous TGA and DSC Measurement
- -160°C to 1650°C
- Vertical Balance Design Eliminates Single Beam Growth Error

TA Instruments, 159 Lukens Drive, New Castle, DE 19720
Telephone: (302) 427-4000 • Fax: (302) 427-4001 • E-mail: info@tainstruments.com

www.tainstruments.com