

## Thermogravimetry/Differential Thermal Analyzer (TG/DTA) 6300 (with Auto Sampler AST-2)

The Thermogravimetry (TG) and Differential Thermal Analyzer (DTA) has been designed to simultaneously perform thermogravimetric and differential thermal analytic measurements on inorganic materials like ceramics and metals, as well as on high polymer organic materials. TG/DTA also is used for reaction velocity and acceleration degradation tests, as well as analysis of the water and ash content in samples, and evaluation of decomposition, oxidation and heat resistance of samples. The TG/DTA is a simultaneous measurement instrument combining TG, which utilizes a horizontal differential type balance beam, with the highly flexible DTA feature. This instrument is designed for easy use, while maintaining precision measurement capabilities.



### General description of EXSTAR 6000 TG/DTA 6300

**Temperature Range:** Room temperature to 1500°C (normally around 1300°C);  
**Balance Method:** Horizontal differential type;  
**Maximal sample weight:** 200mg;  
**Program rate:** 0.01 to 100°C/min;  
**Automatic Cooling unit:** Force Air Cooling;  
**Gas flow rate:** 0 to 1000ml/min;  
**Cooling rate:** less than 15 min from 1000 to 50°C;  
**Atmosphere:** Air, Inert gas, Vacuum ( $10^{-2}$  Torr);  
**Sample pan material:** Platinum, Alumina and Aluminium.

### Specification of Auto Sampler AST-2

**Sample Set Number:** Max 30 sets.

### Specification of thermogravimetry (TG):

**TG measurement Range:**  $\pm 200$ mg;  
**TG noise:** 0.1ug;  
**TG Sensitivity:** 0.2 ug.

### Specification of Differential Thermal Analyzer (DTA):

**DTA measurement Range:**  $\pm 1000\mu$  V;  
**DTA noise:** 0.03uV;  
**DTA Sensitivity:** 0.06uV;  
**Thermocouple:** Platinum – platinum rhodium 13%.