

# THEMYS DUO



- ULTRA-HIGH TEMPERATURE CAPABILITY**  
to 1750 °C with the same dual furnace
- HIGHEST ACCURACY WITH ITS HANG-DOWN SYMMETRICAL BEAM BALANCE**  
eliminate drift & buoyancy effect, improve gas/sample interaction
- MODULAR ADAPTATIONS ALLOWING**  
up to 1750 °C: TGA, DTA, TG-DTA  
up to 1600 °C: DSC, TG-DSC
- ACCURATE AND SENSITIVE**  
Tri-couple DTA technology
- VARIETY OF ATMOSPHERE CONDITIONS**  
multiple carrier and reactive gas options
- EXTERNAL COUPLING CAPABILITY**  
designed for evolved gas analyzers (FTIR, MS, GCMS, MSFTIR, or FTIR-GCMS)

GENERAL		TGA	STA	
			DTA, TG-DTA	DSC, TG-DSC
<b>Temperature range (°C)</b>		Ambient to 1750	Ambient to 1750	Ambient to 1600
<b>Programmable heating rate (°C/min)</b>		0.01 to 100		
<b>Crucibles volumes and maximum sample size</b>		55 to 1 500 µl or Height: 20 Diam: 14 mm without crucible	20 to 300 µl	75 to 110 µl
<b>Gas flow</b>	<b>PureGas option</b>	1 carrier gas flow among 3 connected, 1 Mass Flow Controller (MFC)		
	<b>GasBlend option</b>	1 carrier gas flow among 3 connected + 1 auxiliary gas flow, 2 MFC		
	<b>Corrosive gases option</b>	1 carrier gas flow among 3 connected, 1 Mass Flow Controller (MFC) + 1 corrosive gas line without mass flow control		
<b>Vacuum</b>		Primary (< 1 mbar), forced primary (< 5.10 <sup>-2</sup> mbar) options		
<b>Weight</b>		145 kg / 320 lbs		
<b>Dimensions (Height / Width / Depth)</b>		170 / 60 / 55 cm (66.9 / 23.6 / 21.6 in)		
BALANCE				
<b>Measuring range (mg)</b>	<b>Small</b>	+/- 20		
	<b>Large</b>	+/- 200		
<b>Maximum loading capacity (g)</b>		35		
<b>TGA baseline drift (temperature scanning)<sup>b,c</sup></b>		5 µg up to 1700 °C		
<b>TGA baseline drift precision (µg)<sup>c</sup></b>		+/- 1		
<b>Balance resolution (small range) (µg)</b>		0.002		
DTA/DSC		DTA, TG-DTA	DSC, TG-DSC	
<b>Calorimetric precision<sup>c,e</sup></b>		+/- 2 % <sup>f</sup>	+/- 1 %	
<b>Temperature precision<sup>c,e</sup></b>		-	+/- 0.4 °C	
<b>Temperature accuracy<sup>c,e</sup></b>		+/- 0.4 °C	+/- 0.25 °C	

b. Under helium flow; c. Typical data; e. Based on metal standard melting; f. If calibrated  
Specifications are subject to change