Technical Specifications



	STA 449 F5 Jupiter®
Design	Top-loading
Temperature range	RT 1600°C (sample temperature)
Furnace	SiC furnace on motorized hoist for safe, simplified operation
Heating rate	0.001 to 50 K/min
Sensors	 TGA-DSC (standard in system version I) TGA-DSC_{ASC} (standard for system version II with automatic sample changer) TGA (optional for up to large sample sizes) TGA-DTA (optional) All sensors are easily interchangeable within seconds
Vacuum-tight	10 ⁻² mbar
AutoVac	Integrated for software-controlled automatic evacuation
Evacuation system	Yes
Atmospheres	Inert, oxidizing, static, dynamic, vacuum
Automatic sample changer (ASC)	20 crucible positions (standard for system version II)
Gas flow control	3 mass flow controllers integrated for 1 protective and 2 purge gases
Temperature resolution	0.001 K
Balance resolution	0.1 μg (over the entire weighing range)
BeFlat	Integrated for flat baselines → considers buoyancy correction due to influences by crucible, atmosphere, heating rate, etc.
Balance drift	< 5 μg/hour
Maximum sample load	35000 mg (incl. crucible), corresponds to TGA measuring range
Sample volume	Up to 5 cm ³ (for TGA crucibles)
DSC enthalpy accuracy	± 2% (for most materials)
Evolved gas analysis	QMS, GC-MS and/or FT-IR couplings (options)
Dimensions	600 x 700 x 650 (900) mm
Weight	83 kg (excl. computer)