Technical Specifications



DMA 242 E Artemis	
Temperature range	-170°C to 600°C
Heating rate	0.01 K/min to 20 K/min
Frequency range	0.01 Hz to 100 Hz
Force range with high force Force range with high resolution	24 N (max.) 8 N (max.)
Maximum controlled strain amplitude	± 240 μm
Static deformation	Up to 20 mm
Modulus range	10 ⁻³ to 10 ⁶ MPa
Damping range (tanδ)	0.005 to 100
Cooling device	 Liquid nitrogen: -170°C to 600°C Compressed air with vortex tube: 0°C to 600°C AIC 80 air intracooler: -70°C to 600°C; AIC 80 is activated < 300°C
Deformation modes	 3-point bending Single / dual cantilever bending Shearing Tension Compression/penetration
Additional measurement modes	 Iso-strain TMA mode Creep / relaxation Stress / strain sweep
Sample geometries	Dependent on the deformation mode, e.g., for 3-point bending maximum sample dimensions: length: 60 mm, width: 12 mm, thickness: 5 mm
Optional accessories	 Immersion bath Humidity generator UV equipment Dielectric Analyzer (DEA)