

Specifications LFA L52 LT/1250/1600/2000/2400/2800

	LFA L52 LT/1250/1600/2000/2400/2800
Temperature range	-125/-100 up to 500°C RT up to 1250/1600°C RT up to 2000/2400/2800°C
Heating rate	0.01 up to 50 K/min (LT/1250/1600) 0.01 up to 100 K/min (2000/2400/2800)
Thermal Diffusivity	0.01 up to 2000 mm ² /s
Thermal Conductivity	0.1 up to 4000 W/(m·K)
Accuracy	Thermal diffusivity ± 2.4 % Specific Heat ± 5 %
Repeatability	Thermal diffusivity ± 1.9 % Specific Heat ± 3 %
Flash source	Nd:YAG-Laser up to 25 J/pulse Variable pulse energy: Software controlled Pulse width: 50 up to 5000 µs
IR-detector	InSb (LN ₂ cooled): ≥ RT MCT (Peltier cooled): ≥ RT MCT (LN ₂ cooled): -125 °C up to 500 °C
Atmosphere	Vacuum, inert, reducing, oxidizing
Vacuum	Up to 10 ⁻³ mbar (2-stage rotary pump) Up to 10 ⁻⁵ mbar (turbo molecular pump)
Data acquisition	2.5 MHz
Gas control	Manual or MFC gas dosing systems
Sample holders	For round, square, powders, pastes, laminates, liquid samples, mechanic pressure and in-plane Customized sample holders on request
Sample size	ø 3/ 5/ 6/ 8/ 10/ 12.7/ 25.4 mm, or 3x3/ 5x5/ 6x6/ 10x10/ 20x20 mm ² (from 0.01 mm up to 6 mm height)
Sample numbers	Up to 3 samples (2000/2400/2800) Up to 6 samples 18 on request (LT/1250/1600)
Further options	PLH upgrade for thin film measurement, Separated electronics in protected environments, Fiber or free space laser option