

Specifications LFA L51 LT/500/1000/1250

	LFA L51 LT/500/1000/1250
Temperature range	-100 up to 500 °C RT up to 500 / 1000 / 1250 °C *Boost function up to 1450 °C (limited furnace lifetime / LFA L51 1250)
Heating rate	0.01 up to 100 K/min
Cooling rate	Max. 50 K/min (depends on model)
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	Light flash 15 J/pulse Variable pulse energy: software controlled Pulse width: 50 up to 2000 µs On request: 10 up to 1600 µs
IR-detector	InSb: ≥ RT MCT: -100 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, samples and mechanic pressure, thin films
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 6 samples (18 on request) Up to 5 samples (LFA500/1250)
Further options	PLH upgrade for thin film measurement, Separated electronics in protected environments