

TECHNICAL SPECIFICATION

Thermoluminescence TL 6000/ST

Thermoluminescence TL 6000/ET

Thermoregulation	
Thermoregulation system	Peltier element and water cooling unit (TL 6000/ST) Nitrogen tank and resistance heater (TL 6000/ET)
Temperature range	-25 – 70 °C (TL 6000/ST) -100 – 200 °C (TL 6000/ET)
Maximal linear heating rate	1.5 °C/s (TL 6000/ST) 1.8 °C/s (TL 6000/ET)
Temperature control	Manual (constant temperature) Protocol defined temperature profiles
Overheating protection	Yes
Illumination – LED lighting	
Light source	623 nm
Saturating pulse	Up to 300,000 $\mu\text{mol}(\text{photon}).\text{m}^{-2}.\text{s}^{-1}$
Actinic light	Up to 2,000 $\mu\text{mol}(\text{photon}).\text{m}^{-2}.\text{s}^{-1}$
Detector	
Type	Photomultiplier with sensitivity software control
Spectral response	300 nm - 900 nm
Minimum sampling period	100 ms
Switch-On delay	100 ms
Ambient light protection	Yes
Sample disc	
Material	Gold-plated copper
Diameter	14 nm (TL 6000/ST) 22 nm (TL 6000/ET)
Typical samples	Algal and cyanobacterial suspensions Leaf segments
Software	
Type	FluorWin 3.7
Control	Predefined protocol as well as custom defined protocols with variable timing, special language and scripts
Communication	RS232/USB
Other	
Control unit dimension	365 x 275 x 150 mm
Measuring unit dimension	310 x 200 x 200 mm
Electrical	90 VAC – 240 VAC, 50 Hz – 60 Hz