

record specs.

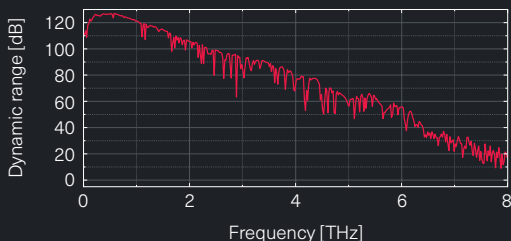
For scientific applications

TeraFlash pro

Versatile time-domain
terahertz platform



- Up to 120 dB peak dynamic range
- > 6 THz bandwidth
- Variable terahertz path length between 15 cm and 110 cm
- “Dual” version for 2 emitter/receiver pairs



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TeraFlash pro



Class 1 Laser Product EN 60825-1:2014.
Invisible laser radiation.
Avoid direct exposure to beam.

Specifications	TeraFlash pro / Dual	TeraFlash pro HP
Spectral range	0.1 – 6 THz (typ. 6.5 THz)	0.1 - 6 THz (typ. 6.5 THz)
Spectral peak dynamic range	100 dB	120 dB
Useable terahertz path length	15 – 110 cm, continuously adjustable via software	
Components	One femtosecond laser SM/PM fiber delivery 2 mechanical delay stages (stationary / moving) 2 (optionally 4) InGaAs photoconductive switches Electronics for data acquisition	
Laser wavelength	1560 nm	
Laser pulse width	typ. 50 .. 80 fs	
External fiber length	2.5 m (other lengths u.r.)	
Terahertz emitter	PCA-TD-250-TX-1: InGaAs/InP photoconductive switch with strip-line antenna, 2.5 m fiber pigtail	PCA-TD-250-TX-4: High-power InGaAs/InP photoconductive switch with strip-line antenna, 2.5 m fiber pigtail
Terahertz receiver	PCA-TD-250-TX-1: InGaAs/InP photoconductive switch with dipole antenna, 2.5 m fiber pigtail	
Antenna package	Cylindrical, Ø 25 mm, integrated Si lens and SM/PM fiber pigtail	
Number of channels (antenna pairs)	2	
Scan range	5 .. 2500 ps, software-controlled	5 .. 3000 ps, software-controlled
Scan speed	166 traces/s (5 ps) 95 traces/s (20 ps) 60 traces/s (50 ps) 6 traces/s (200 ps) Intermediate settings possible	
Average terahertz power	typ. 70 µW	typ. 300 .. 400 µW
Frequency resolution @ max. scan range	0.4 GHz	0.3 GHz
Computer interface	Ethernet	
Computer software	GUI or command set	
Size (H x W x D)	180 x 450 x 560 mm³	
System weight	20 kg	
Operating voltage	110 / 220 V AC	
Accessories	Transmission optomechanics, Reflection head, Imaging extension	