

record specs.

for scientific applications

TeraFlash pro

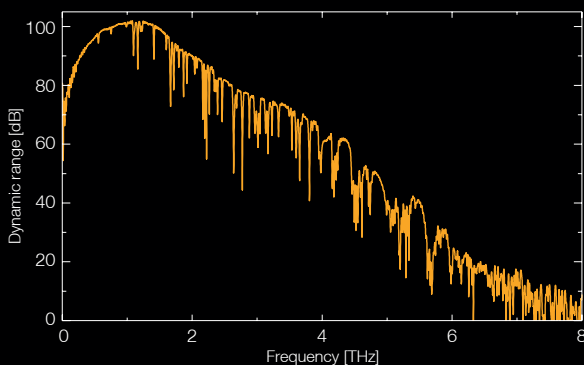
Versatile time-domain

terahertz platform



- 100 dB dynamic range & more than 6 THz bandwidth
- Flexible path length setting: 15 – 110 cm
- **NEW:** Dual option – simultaneous operation of 2 antenna pairs

Broadband spectroscopy



Imaging



Convince yourself
and apply for your
own free live demo!



TeraFlash pro



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

Specifications*	
Components	One femtosecond laser SM/PM fiber delivery 2 mechanical delay stages (stationary / moving) 2 (optional 4) InGaAs photoconductive switches Electronics for data acquisition
Laser wavelength	1560 nm
Laser pulse width	typ. 80 fs
Laser repetition rate	100 MHz
External fiber length	2.5 m
Terahertz emitter	PCA-TD-250-TX-1: InGaAs/InP photoconductive switch with 25 μ m strip-line antenna, 2.5 m fiber pigtail
Terahertz receiver	PCA-TD-250-RX-1: InGaAs/InP photoconductive switch with 25 μ m dipole antenna, 10 μ m gap, 2.5 m fiber pigtail
Antenna package	Cylindrical, 25 mm, integrated Si lens and SM/PM fiber pigtail
Scan range	5 .. 1000 ps
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
Spectral range	0.1 – 6 THz
Average terahertz power	typ. 30 μ W
Time-domain dynamic range	100 dB
Spectral peak dynamic range	100 dB
Useable terahertz path length	15 – 110 cm, adjustable via software (stationary delay)
Frequency resolution @ max. scan range	1 GHz
Option DUAL	Simultaneous operation of 2 antenna pairs
Computer interface	Ethernet
Computer software	LabView-based GUI, included
Size (H x W x D)	180 x 450 x 560 mm ³
System weight	20 kg
Operating voltage	110 / 220 V AC
Accessories	Transmission optomechanics, Reflection head, Imaging extension

*) Subject to change without notice