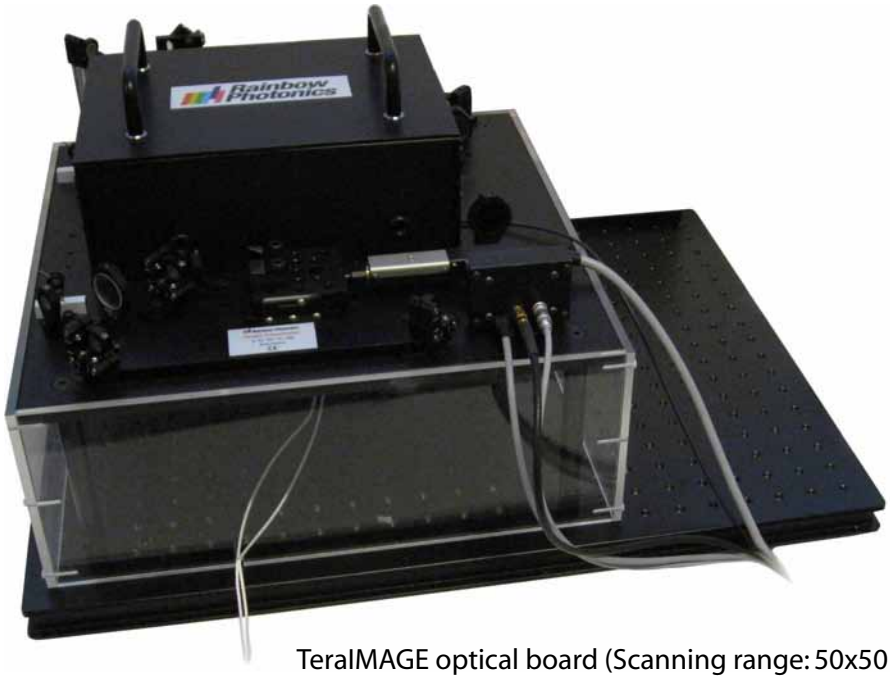
Rainbow Photonics

NEW

TeraIMAGE

The flexible solution for THz spectroscopy and imaging

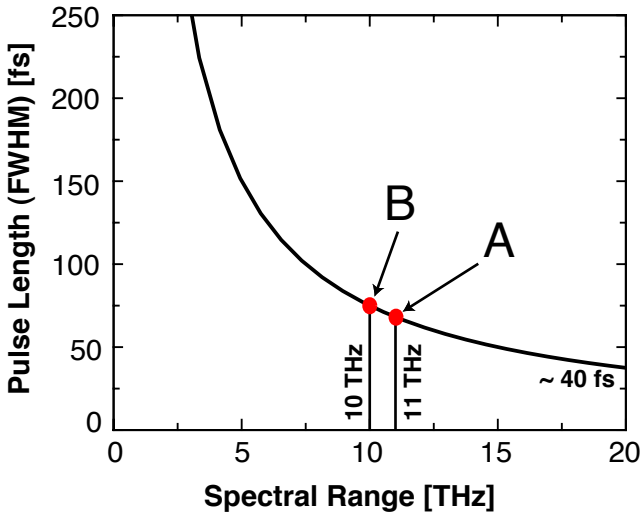
The ***TeraIMAGE*** provides a flexible solution for laboratory THz spectroscopy and imaging. It is based on organic crystals, to allow access to terahertz frequencies not yet available with conventional antennas. The ***TeraIMAGE*** includes all optical, mechanical and electronic components for the generation and detection of THz waves such as delay line, terahertz generator, terahertz detector, optics, electronics, dedicated software and laptop.
It can be used with any femtosecond laser source at telecom wavelengths.

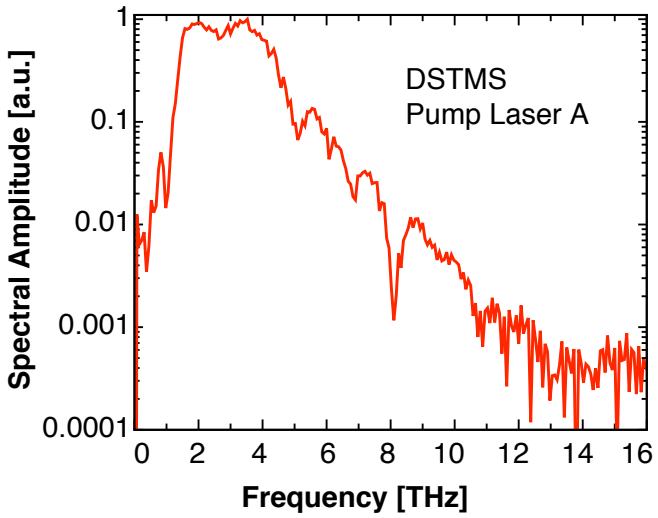


TeraIMAGE optical board (Scanning range: 50x50 mm^2).

Specifications	***TeraKit-D***	***TeraKit-O***	***TeraKit-DS***
THz generator Spectral range Best phase matchable wavelength	DAST 0.3 – 11 THz 1300 – 1600 nm	OH1 0.1 – 3 THz 1200 – 1460 nm	DSTMS 0.1 – 11 THz 1300 – 1700 nm
Requirements *External femtosecond laser source*			
Options ✦ *Scanning range of 100x100 mm^2* ✦ ***TeraIMAGE*** *including pump laser source (< 70 fs or < 80 fs)*			

Dependence of the THz spectral bandwidth on the pump pulse length and frequency domain spectrum measured in dry air with the ***TeraIMAGE*** using DSTMS as terahertz generator and detector and pump laser A (68 fs).





Pump source	A	B
Spectral range	0.1 - 11 THz	0.1 - 10 THz
Dynamic range	> 50 dB	> 60 dB
Scan range	up to 60 ps	up to 60 ps
Pulse length	< 70 fs	< 80 fs
Total average power	> 180 mW	> 350 mW
Central wavelength	1565 nm	1565 nm
Repetition rate	100 MHz	40 MHz/80 MHz

Other spectral ranges are available upon request.

Rainbow Photonics AG
Farbhofstrasse 21
CH-8048 Zürich

Phone: ++41 44 419 05 05
Fax: ++41 44 419 05 06
E-mail: info@rainbowphotonics.com
Web: www.rainbowphotonics.com