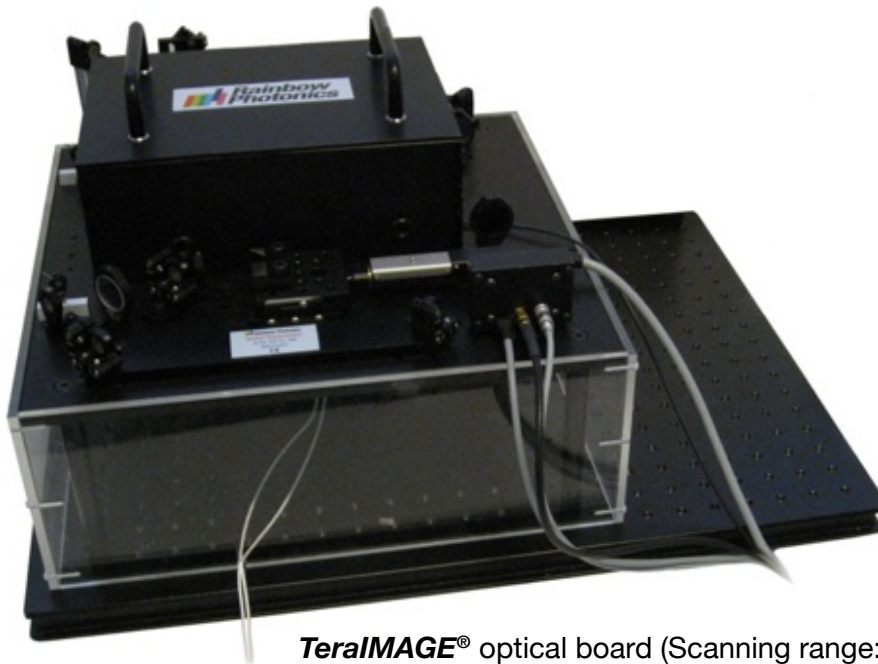


# TeraIMAGE®

## 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 available with conventional antennas (up to 20 THz). It 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, lock-in, custom made Er based femtosecond fiber laser source at telecom wavelengths.

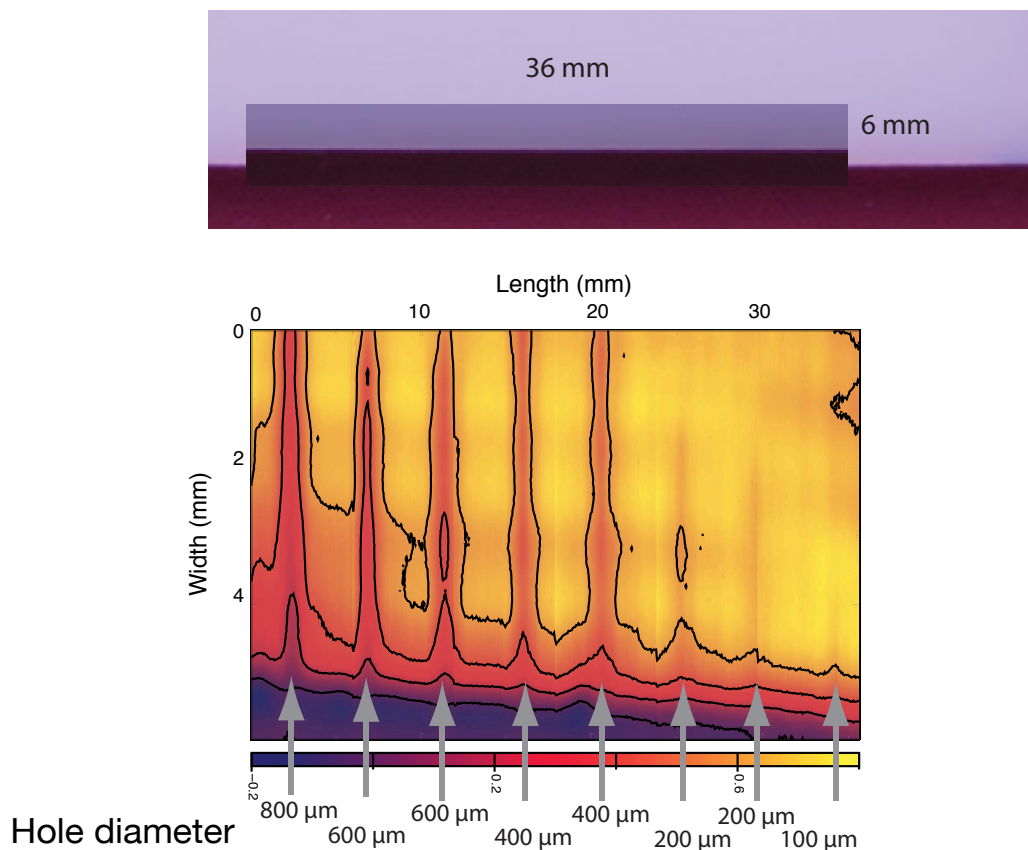


**TeraIMAGE®** optical board (Scanning range: 50x50 mm<sup>2</sup>)

<b>TeraIMAGE® Specifications</b>	
THz generator / detector	Organic crystal
Spectral range	1–14 THz
Best phase matchable wavelength	1300–1600 nm
<b>Options</b>	
Scanning range of 100x100 mm <sup>2</sup>	

THz image of hidden holes in UHMWPE (Ultra high molecular weight polyethylene) detected with the **TeraIMAGE®**

Resolution limit < 50 µm



### **TeraIMAGE® Specifications**

Spectral range	1 - 14 THz
Dynamic range	> 60 dB, (@4THz)
Scan range	up to 60 ps
Frequency resolution	< 100 GHz
Dimensions	30 x 38 x 17 cm <sup>3</sup>

### **Custom made pump source**

Pulse length	< 20 fs
Total average power	> 200 mW
Peak power	> 120 kW
Central wavelength	1565 nm
Repetition rate	> 80 MHz

Other spectral ranges are available upon request.

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