

TeraSys[®] – ULTRA

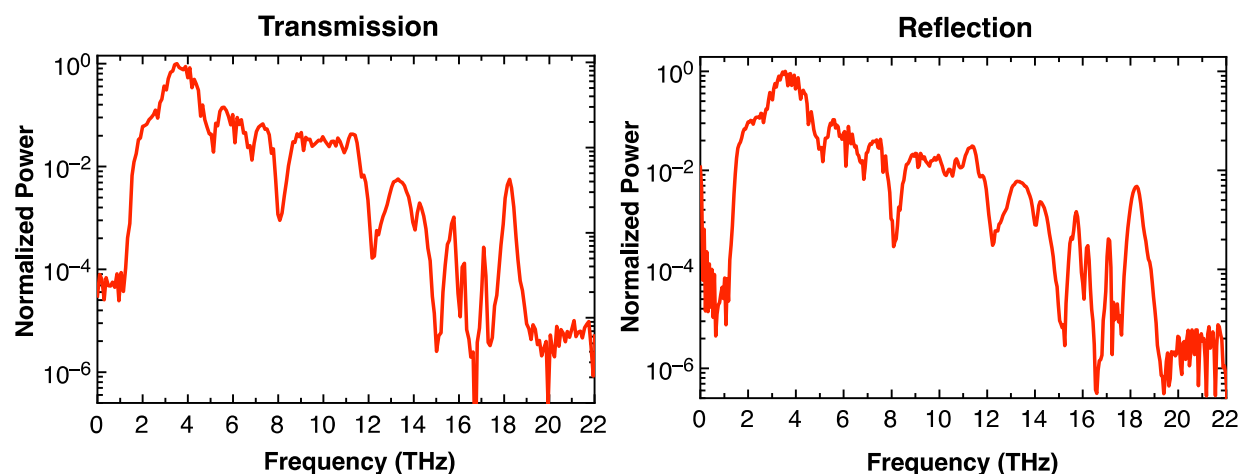
Ultra–Wide THz Bandwidth for Spectroscopy and Imaging

The ***TeraSys[®] – ULTRA*** is the ultimate solution for real-time THz imaging and spectroscopy. It is a compact terahertz instrument addressing: sensing, detection, analysis, and processing methods at terahertz frequencies in real-time. It is based on organic crystals to allow access to terahertz frequencies up to 20 THz not available with conventional photoconductive antennas.



- Frequency range 0.3 – 20 THz
- Real time acquisition, 4 spectra per second
- Purge chamber with humidity sensor
- Dedicated software and computer control
- Maintenance free
- Compact design

Frequency domain spectrum measured with the **TeraSys® – ULTRA** using DSTMS organic crystals as terahertz generator and detector in transmission and reflection.



<i>TeraSys® – ULTRA Specifications</i>	
Spectral range	0.3 – 20 THz
Acquisition speed	4 spectra per second
Scan range	>300 ps
Dynamic range	>70 dB (@ 4 THz)
Frequency resolution	< 10 GHz
Dimensions	55 cm x 60 cm x 30 cm
Pump Source (high power ultrafast fiber laser)	
Pulse length	< 20 fs
Total average power	> 200 mW
Peak power	> 240 kW
Central wavelength	1565 nm
Repetition rate	40 MHz