

# **TeraSys<sup>®</sup> – ULTRA**

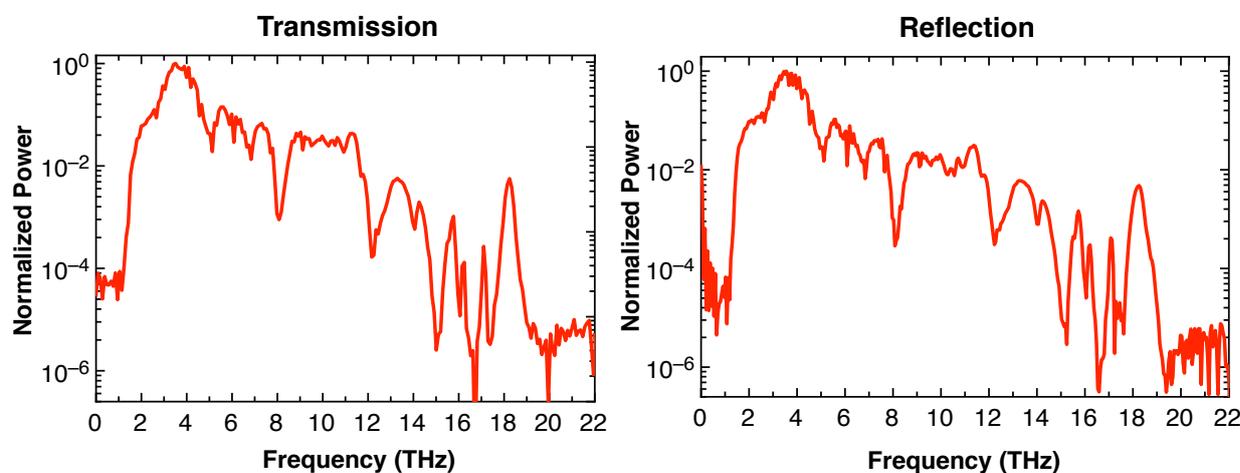
## ***Ultra–Wide THz Bandwidth for Spectroscopy and Imaging***

The **TeraSys<sup>®</sup> – 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.



### **TeraSys® – ULTRA Specifications**

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

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