



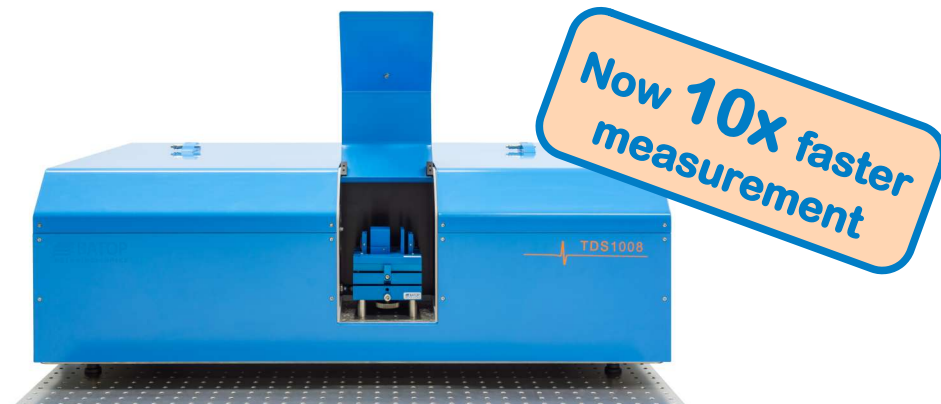
Benchtop TDS10XX system for THz spectroscopy

Spectral range up to 5 THz

Dynamic range larger than 85 dB

Sample compartment with nitrogen purge

Option for external fiber-coupled antennas



TDS10XX system includes

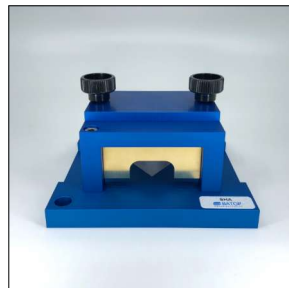
- Sample compartment with N₂ purge for nondestructive material characterization measurements
- Femtosecond laser system, beam guiding optics, delay line and DAQ system inside the housing
- Unified pulse generator, signal amplifier and lock-in detector
- Easy operation and data management via Laptop with our pre-installed T3DS software

Optional equipment

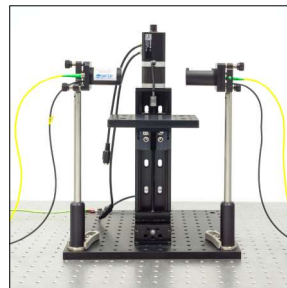
- SHR – Sample holder for reflection measurements
- SHA – Sample holder for attenuated total reflection measurements
- FSU – Fast scan unit for THz beam adjustment
- IU150 – Imaging Unit with imaging area of 150mm x 150mm
- T2T – Theta-2-Theta angular scanning unit for reflection measurements



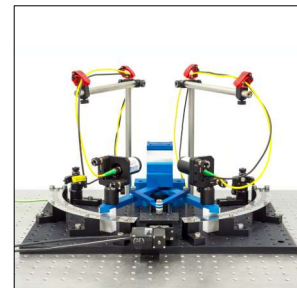
SHR



SHA



IU150



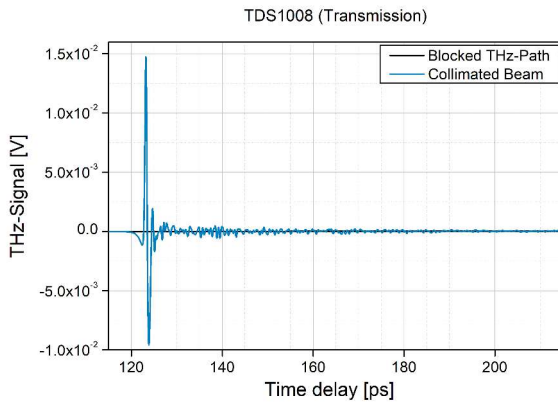
T2T



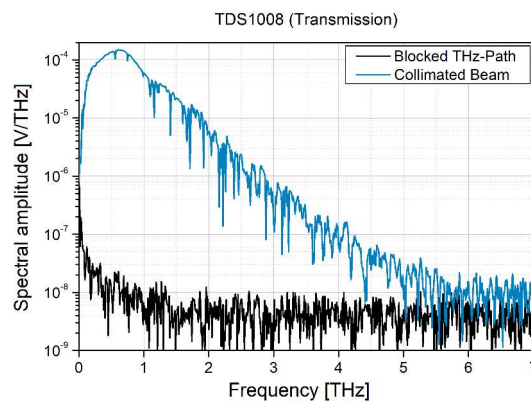
Specifications

Spectrometer	TDS1008	TDS1015
Laser System	780 nm	1560 nm
Spectral Range	50 GHz – 5 THz	50 GHz – 1.5 THz
Dynamic Range	> 85 dB	> 65 dB
Max. Scan Range	500 ps	
Spectral Resolution	≥ 2 GHz	
THz Beam Diameter	22 mm (collimated beam) 1 mm (focused beam)	
Supply Voltage	110 – 230 V / 50 – 60 Hz	
Spectrometer Dimensions	90 x 60 x 30 cm	
Spectrometer Weight	90 kg	

THz Signal & Spectrum



THz pulse for internal antennas



THz spectrum for internal antennas

T3DS software



- Quick and easy configuration of the spectrometer setup and sampling parameters
- Separate measurements of baseline, reference and sample spectra
- Stepping measurement of THz signal for high signal-to-noise ratio
- Option for imaging or angular measurements included in software package