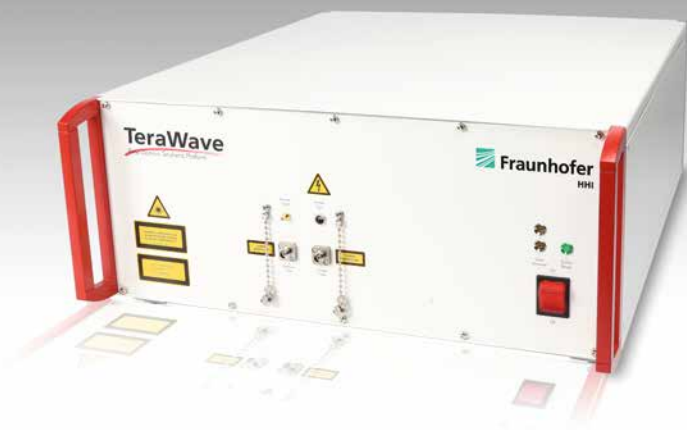


TERAWAVE TIME DOMAIN SPECTROMETER

AT A GLANCE

- All-fiber Terahertz spectrometer operating at 1.5 μm optical wavelength



Features

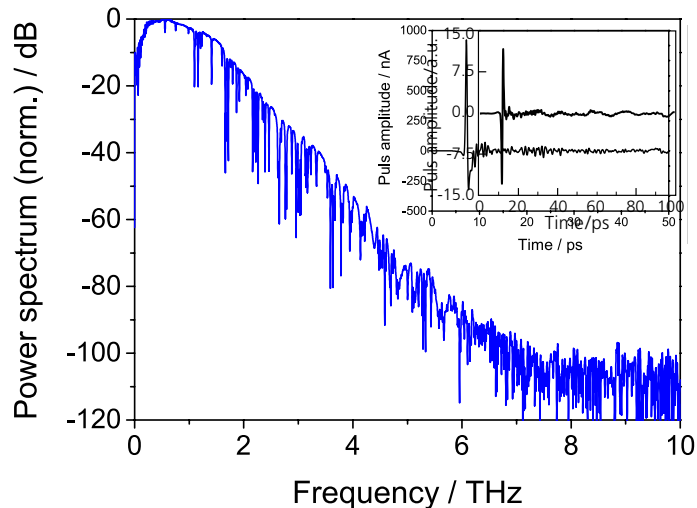
- Turnkey operation
- Full fiber coupling
- Custom fiber extend
- Realtime data acquisition mode
- High power extension

Applications

- High-bandwidth terahertz spectroscopy
- Industrial process control
- Non-contact coating film thickness measurement

Specifications

■ Average optical power	2 x mW
■ Pulse duration	100 fs
■ Spectral range	0.1 THz
■ Dynamic range (peak)	> dB*
■ Frequency resolution	5 GHz
■ THz power	
■ Acquisition rate	
■ Size	48 x 40 x 20 cm ³
■ Weight	16 kg
■ Price starting from	Euro



Frequency spectrum recorded with HHI's THz modules. The inset shows the trace of the electrical THz pulse. The operating conditions are given in the specifications.

Technical background

Mobile THz systems for field operation – Robust and agile THz systems are the foundation for transferring THz technologies from research facilities to industrial environments. Our Time Domain Spectrometer (TDS) is based on mature telecom components, all

operating at an optical wavelength of 1.5 μm. Utilizing HHI's fiber-coupled emitter and detector modules, our THz system provides a unique combination of flexibility and high performance. This allows us to adapt our THz system to your THz application.

The Fraunhofer HHI

One of the prime research and development foci of the Fraunhofer Heinrich Hertz Institute lies in photonic networks, components and systems and their application in fields such as digital media.

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