

Press Release

September 19, 2014

THz-TDS: Menlo Systems Improves Spectral and Dynamic Range

With the introduction of our innovative ultra-stable 'figure 9' laser technology and our fiber coupled high-power THz antenna modules we have improved the performance and design of our fiber coupled TERA K15 THz-TDS system. The new generation TERA K15 provides up to 4.5 THz bandwidth and up to 80 dB signal-to-noise ratio. The housing of the fiber coupled THz modules is compatible with standard 1-inch optomechanics, and the fiber patch cord can be extended to up to 30 m. The new amplifier electronics ensure an even further simplified and user friendly measurement scheme.

The major benefits of our improved TERA K15 for THz spectroscopy and imaging application are the ability of faster data acquisition and to investigate thicker and less transparent samples in the THz range. Higher THz power also helps overcoming the limitations of a signal attenuated due to propagation in atmosphere. Data acquisition is largely unaffected by mechanical impact, thermal instability or ambient humidity.

The result of our efforts is our most robust THz-TDS system offering highest flexibility. It allows bringing the THz experiment to the site where it is needed in exactly the configuration required by the specific task, both are mandatory for OEM integrators who seek reliable systems for non-destructive material quality testing.



Figure: TERA K15 configured for measurements outside the spectrometer housing

Contact:

Menlo Systems GmbH
Am Klopferspitz 19a
82152 Martinsried, Germany
Phone: +49 89 189166 0
Fax: +49 89 189166 111
sales@menlosystems.com

www.menlosystems.com
www.frequencycomb.com

Menlo Systems, Inc.
56 Sparta Avenue
Newton, NJ 07860, USA
Phone: +1 973 300 4490
Fax: +1 973 300 3600
usales@menlosystems.com

About Menlo Systems:

Menlo Systems, a leading developer and global supplier of instrumentation for high-precision metrology, was founded 2001 as spin-off of the Max-Planck-Institute of Quantum Optics. Known for the Nobel-Prize-winning Optical Frequency Comb technology, the Munich based company offers complete solutions based on ultrafast lasers, synchronization electronics and THz systems for applications in industry and research.