

THz Spectroscopy Kit

TERAVIL "THz spectroscopy kit" contains all the components necessary to build THz-TDS system. The standard kit consists of photoconductive antenna THz emitter and detector, pump laser beam guiding optics, motorized delay line with controller, THz beam guiding optics, sample holder and THz registering system TRS-16 with fast delay line. All components are assembled on the

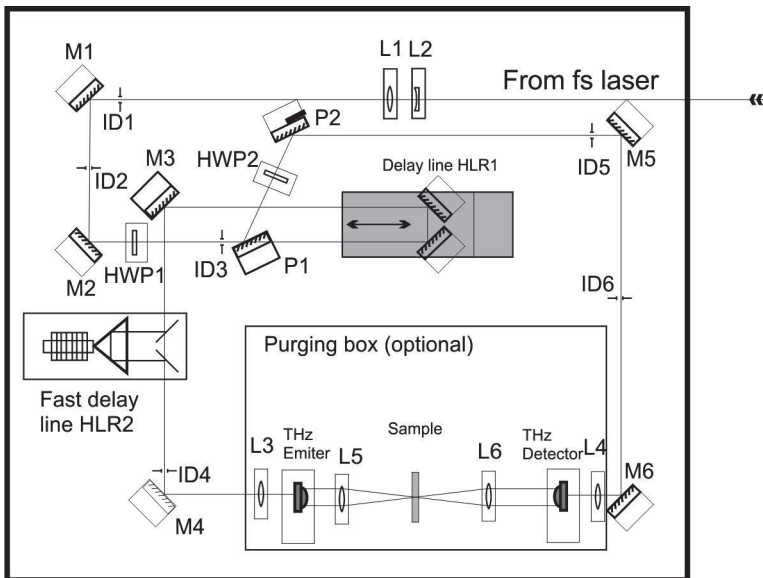
baseplate of 60×80 cm or 80×80 cm dimensions. Four standard configurations are available, optimized for transmission, reflection, imaging or pump-probe measurement. All can be easily interchanged and modified. Any other optional configuration can be ordered initially or as a future upgrade. THz spectroscopy kit includes powerful system control, data acquisition and analysis software package.

BASIC THz SPECTROSCOPY KIT INCLUDES:

- ▶ THz emitter and detector
- ▶ Pump laser beam guiding optics
- ▶ Motorized slow delay line with controller
- ▶ THz beam guiding mirrors
- ▶ Sample holder
- ▶ Terahertz Registration System TRS-16 with fast optical delay line
- ▶ Software for data acquisition and analysis

OPTIONAL ITEMS:

- ▶ Femtosecond laser
- ▶ Purging box, removes water absorption lines
- ▶ Motorized X,Y sample stage

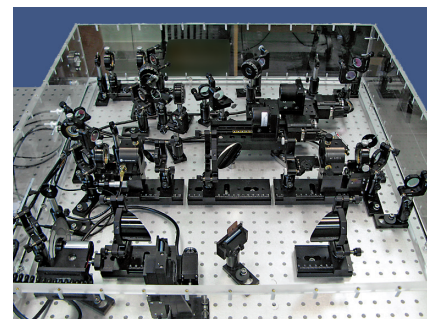


Optical layout of THz spectroscopy kit in transmission configuration

OUR CUSTOM THz SYSTEMS EXAMPLES



LIDAR operating in terahertz range was used to scan remote objects at 7 m distance.
THz LIDAR installed in Lomonosov Moscow State University, Russia



Optical pump – terahertz probe spectroscopic technique allows investigation of carrier dynamics in semiconductors, nanocrystals, and other materials.
Optical pump-THz probe system installed in The Institute of Physics, Chinese Academy of Sciences, Beijing, China