

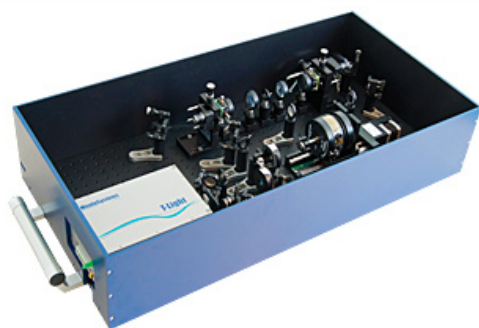
**THORLABS**

## TERA-K15-NL - DEC 18, 2017

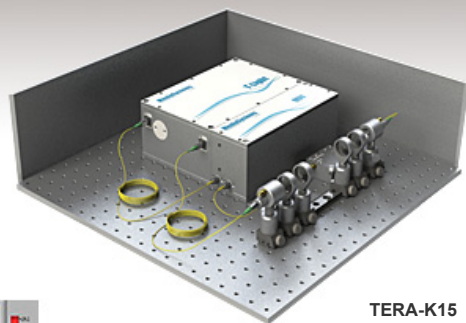
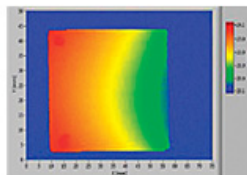
Item # TERA-K15-NL was discontinued on DEC 18, 2017. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

### THZ KITS

- ▶ Turn-Key THz Generation and Detection
- ▶ Rapid Scan and Step Scan Operation
- ▶ All-PM Femtosecond Fiber Laser with Figure 9 Technology
- ▶ Free-Space and Fiber-Coupled Versions Available



TERA-K8



TERA-K15

## OVERVIEW

## Applications

- Time Resolved THz Spectroscopy
- Chemical Fingerprinting
- Material Characterization
- THz Imaging

## Features

- Turn-key Operation
- Broadband Application
- Fiber-Coupled Configuration Available
- Transmission and Reflection Geometry
- Real-Time Measurement
- Supports Stand-Alone Femtosecond Laser Applications

Item #		TERA-K8	TERA-K15
Antenna Structure		TERA8-1	TERA15-FC
Spectral Range (min)		> 3 THz	> 3.5 THz
Dynamic Range		>60 dB	>70 dB
Time Scan Range		300 ps <sup>a</sup>	
Scan Mode		Rapid or Step Scan	
Femtosecond Laser Source (Included with kit)		C-FIBER-780	T-LIGHT-FC
Kit Dimensions and Weight			
Item #	Dimensions	TERA-K8	TERA-K15
Opto-Mechanical Setup	Dimensions	920 mm x 460 mm x 190 mm (36.2" x 18.1" x 7.5")	540 mm x 460 mm x 200 mm (21.3" x 17.7" x 7.9")
	Weight	44 kg (97 lbs)	34 kg (75 lbs)
THz Control Electronics	Dimensions	920 mm x 460 mm x 190 mm (36.2" x 18.1" x 7.5")	
	Weight	10 kg (22 lbs)	

Our pre-assembled and tested terahertz spectrometer kits provide a complete solution for broadband time-domain THz

- Other Ranges Available on Request

spectroscopy. Each spectrometer kit includes a complete opto-mechanical set up with data acquisition electronics and software. The opto-mechanical portion of the kit includes an optical breadboard with a femtosecond laser source, an optical delay line, a THz emitter and detector, and THz optics. The data acquisition portion includes lock-in detection electronics and a PC with acquisition and evaluation software for ready calculation of the FFT spectrum and extraction of the index of refraction and dispersion. Both free-space (Item # TERA-K8) and fiber-coupled (Item # TERA-K15) solutions are available. Several add-ons to the spectrometer kits are available, including our Reflection Guide for quick manual adjustment of reflection geometries, TeraLyzer software for thin sample analysis, and an additional optical delay stage for time-resolved optical pump-THz probe spectroscopy. For THz imaging applications, our fully automated extension unit TERA Image can be integrated. Please contact Menlo Systems using the information below for details.



Jason  
Reeves  
Sales  
Engineer  
Menlo  
Systems

Feedback? Questions? Need a Quote?

**Contact Us**

Please note that these terahertz kits are available directly from Menlo Systems, Inc. within the United States and from Menlo Systems GmbH outside the United States.

**United States**

Phone: +1-973-300-4490

Email: [ussales@menlosystems.com](mailto:ussales@menlosystems.com)

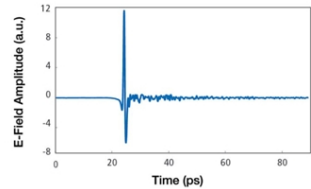
**Outside United States**

Phone: +49-89-189166-0

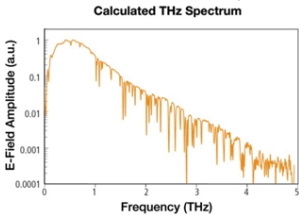
Email: [sales@menlosystems.com](mailto:sales@menlosystems.com)

GRAPHS

TERA-K8 Typical Performance

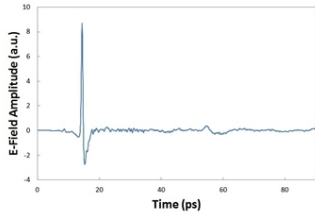


Click to Enlarge  
Measured time domain THz pulse in ambient conditions.

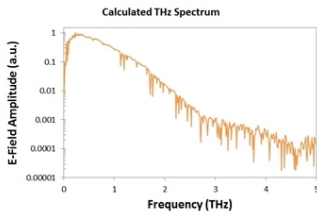


Click to Enlarge  
Calculated THz spectrum from time domain measurement.

TERA-K15 Typical Performance



Click to Enlarge  
Measured time domain THz pulse in ambient conditions.



Click to Enlarge  
Calculated THz spectrum from time domain measurement.

Part Number	Description	Price	Availability
TERA-K8	Terahertz Time Domain Spectrometer Kit for 780 nm	\$0.00	Menlo Lead Time
TERA-K8-NL	Terahertz Time Domain Spectrometer Kit for 780 nm Without Laser	\$0.00	Menlo Lead Time
TERA-K15	Terahertz Time Domain Spectrometer Kit for 1560 nm	\$0.00	Menlo Lead Time
TERA-K15-NL	Terahertz Time Domain Spectrometer Kit for 1560 nm Without Laser	\$0.00	Menlo Lead Time

Visit the *THz Kits* page for pricing and availability information:  
[https://www.thorlabs.com/newgrouppage9\\_pf.cfm?objectgroup\\_id=4713](https://www.thorlabs.com/newgrouppage9_pf.cfm?objectgroup_id=4713)