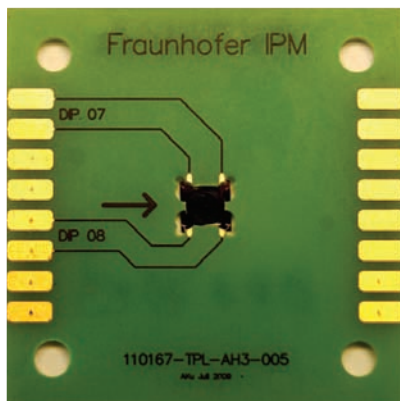


## TERA8-1: THz Antenna for 800 nm

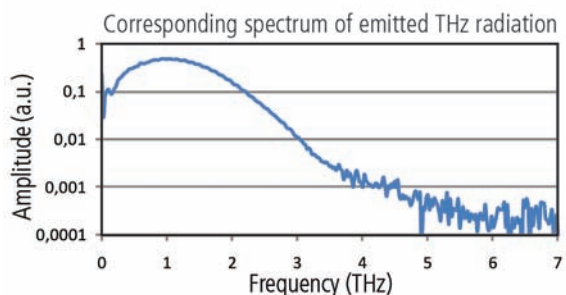
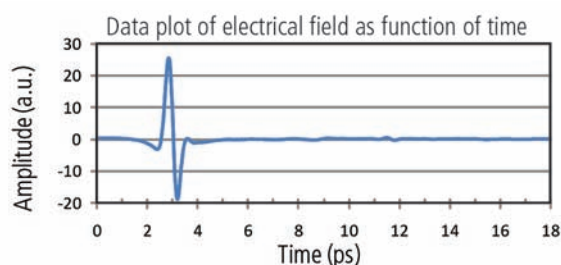


TERA8-1

The TERA8-1 is a single dipole structure. The antenna can be used as an emitter or as a detector. We introduced the TERA8-1 to the market with our collaborator IPM, Fraunhofer Institut für Physikalische Messtechnik.

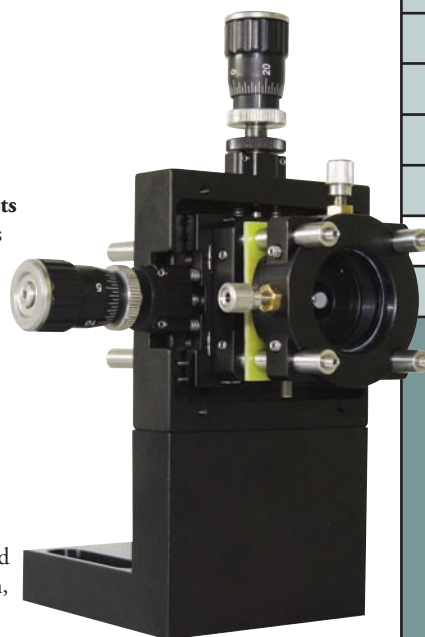
### Features

- Photoconductive Switch Optimized for Lasers Around 800 nm and Pulse Widths <math><150\text{ fs}</math> at 100 MHz Repetition Rate
- 1 Wrapped Dipole Structure on Each Chip
- Low-Temperature-Grown GaAs Dipole Structure
- Each Device is Tested and Ships with Individualized Test Report



### Test Conditions for Data Plots

Optical source: Menlo Systems fs fiber laser operating at 780 nm with 130 fs pulse width. Data recorded with 20  $\mu\text{m}$  dipole used on emitter and detector sides, mechanical chopper at 1 kHz, lock-in detection with 30 ms integration time, 10 mW of optical input power at emitter and detector sides, electrical output of receiver pre-amplified by  $10^7$  before lock-in detection, 45 V bias at emitter.



T8-H2 Holder for Photoconductive THz Antenna Including Focusing Lens for Optical Beam and Si Lens for THz Waves.

### Specifications

Bonded Structure	Wrapped Dipole
Bandwidth	Up to 4 THz
Dipole Length	20 $\mu\text{m}$
Gap Size	5 $\mu\text{m}$
Substrate Size*	5.0 mm x 5.0 mm
Alignment Package	T8-H2

### Recommended Optical Light Sources

Menlo Systems Femtosecond Lasers	T-Light-780, C-Fiber-780
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\* Antenna is mounted on 40 mm x 40 mm PCB board

ITEM #	\$	£	€	RMB	DESCRIPTION
TERA8-1			CALL		Dipole THz Antenna
T8-H2			CALL		THz Alignment Package

For local and updated pricing, please call Menlo Systems, Inc. in North America 973-300-4490, Menlo Systems GmbH in Europe +49-89-189-1660, or Thorlabs Japan, Inc. in Asia +81-3-5979-8889, or email sales@menlosystems.com.