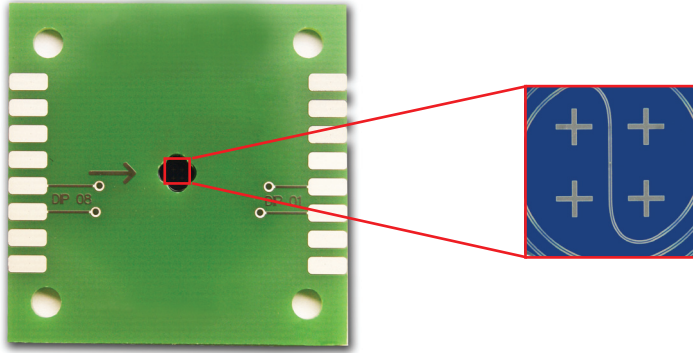


# TERA8-1

## THz-Antennas for 800 nm

**MenloSystems**



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

### KEY SPECIFICATIONS

- >4 THz Bandwidth
- Optimized for Femtosecond Lasers Around 800 nm and Pulse Width <100 fs at 100 MHz Repetition Rate
- High Conversion Efficiency, 10 mW Optical Power Required

### APPLICATIONS

- THz Generation & Detection
- THz Imaging

### FEATURES

- Chip Mounted on PCB
- 1 Wrapped Dipole Structure on Each Chip
- Low Temperature (LT) Grown GaAs Substrate
- Robust Design without Bonding Wires
- Individual Test Report Included

### RECOMMENDED OPTICAL LIGHT SOURCES

- Menlo Systems C-Fiber 780

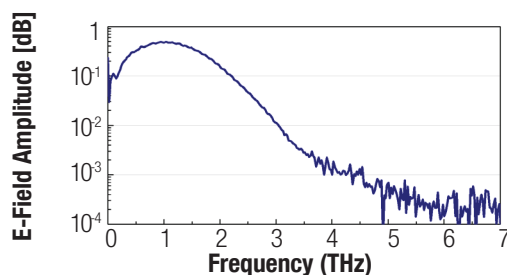
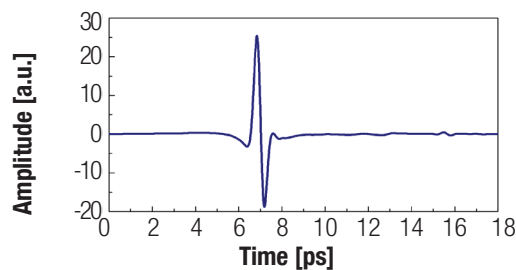
### OPTIONS

- **T8-H2**  
Holder for photoconductive THz antenna including focusing lens for optical beam and Si-lens for THz waves; beam height: 85 mm

### PERFORMANCE DATA

#### Test Conditions for Data Plots

Optical source: fs fiber laser operating at 780 nm and 100 fs pulse width. Data recorded with 20  $\mu\text{m}$  dipole used on emitter and detector side. Mechanical chopper with 1 kHz lock-in detection and 30 ms integration time. 10 mW of optical input power at emitter and detector side, up to 30 V bias for emitter.



### ANTENNA

