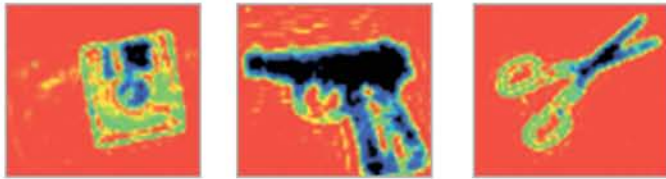


# Terahertz Imaging Camera

- 0.05 - 0.7 THz frequency range
- High responsivity
- Room temperature
- 1.5 year warranty
- Compact and low cost
- Video regime (24 Hz)
- Customer-focused solutions



## DESCRIPTION

TeraSense has developed an original patent-protected technology for making a new type of semiconductor detector arrays for terahertz imaging. The detectors operate at room temperature and arrays are scalable in the number of pixels. The company is developing flexible terahertz imaging solutions for science and industry.

The detectors proposed by Terasense have good responsivity comparable with other available detectors working in terahertz range (50 GHz – 0.7 THz), but in contrast they are low-cost, has uniform pixel-to-pixel sensitivity (pixel-to-pixel deviation of the responsivity is less than 20% ) and they can be easily produced in large quantities in the form of 2D array thanks to compatibility of the Terasense technology with mass semiconductor manufacturing lines. Therefore, the detectors are suitable for use in the terahertz camera without any moving parts.

## SPECIFICATIONS

Model Name	Tera-256	Tera-1024	Tera-4096
Numbe of pixels	256 (16 x 16)	1024 (32 x 32)	4096 (64 x 64)
Pixel Size	1.5 x 1.5 mm <sup>2</sup>	1.5 x 1.5 mm <sup>2</sup>	1.5 x 1.5 mm <sup>2</sup>
Responsivity	50 kV/W	50 kV/W	50 kV/W
Noise Equivalent Power	1 nW/Hz <sup>0.5</sup>	1 nW/Hz <sup>0.5</sup>	1 nW/Hz <sup>0.5</sup>
Device Size	10 x 10 x 5.5 cm	10 x 10 x 5.5 cm	20 x 20 x 10 cm

## TERASENSE

TeraSense is a manufacturer of low-cost portable terahertz imaging cameras, generators and ultrafast detectors. Our products balance at the cutting edge of scientific and technological knowledge. The company has a strong team of 20 skilled scientists and engineers. A wealth of experience in the technologies to detect, generate and manipulate terahertz light allows TeraSense to meet a variety of end-user needs across a number of sciences and industries.