

# TERAHERTZ IMAGING CAMERA

- 0.05 - 0.7 THz frequency range
- High responsivity
- 18 months warranty
- Compact and low cost
- Video mode (24 Hz)
- Software : Terasense Viewer<sup>®</sup> and SDK
- 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 offered 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 producing lines. That makes these detectors suitable for use in our terahertz imaging cameras, which have no moving elements at all.

## 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	12 x 12 x 4 cm	12 x 12 x 4 cm	16 x 16 x 4 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. TeraSense has a steadily growing global outreach supported by a very wide network of authorized distributors/resellers available in more than 30 countries of the world.