TERAHERTZ IMAGING CAMERAS







Description

TeraSense has developed an original patent-protected technology for making a new generation 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
Number of pixels	256 pixels (16 x 16)	1024 pixels (32 x 32)	4096 pixels (64 x 64)
Pixel pitch	1.5 mm	1.5 mm	1.5 mm
Noise Equivalent Power	1 nW/√ Hz	1 nW/√Hz	1 nW/√Hz
Device size	11.5 x 11.5 x 4.2 cm	11.5 x 11.5 x 4.2 cm	16.5 x 16.5 x 4.5 cm

About TeraSense

TeraSense is a manufacturer of low-cost portable sub-terahertz imaging cameras, generators and ultrafast detectors. Our products balance at the cutting edge of scientific and technological breakthroughs. The company is a very strong team of 20 highly skilled scientists and engineers bringing a wealth of experience in the field. TeraSense has a steady growing global outreach supported by a very wide network of authorized distributors available in more than 30 countries of the world.



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