

Sub-THz line camera

TeraSense
renring another vision



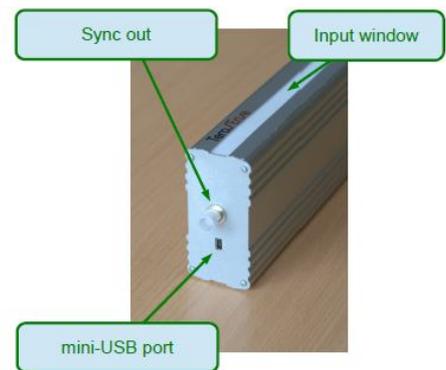
- ✓ Spectral range 0.05 – 0.7 THz
- ✓ Sensor array size 384 x 12 mm
- ✓ High responsivity
- ✓ Video mode (24 Hz)
- ✓ Operates at room temperature
- ✓ USB-powered (5V)
- ✓ Low cost

Description

This *NEW* product craftily builds on the success of Terasense® original patent protected technology for making semiconductor detectors of new type. Such detectors if combined into compact and inexpensive sensor arrays can be employed in sub-THz imaging systems capable of operating at room temperature. *Sub-THz line camera* is based on our standard TERA-series imager (TERA-1024), with a differently configured sensor array meant to satisfy specific demand in THz-imaging for quality control, non-destructive testing and similar industrial applications. It is surely an ideal solution for high-speed conveyor belts.

Set to operate in the sub-Terahertz frequency range (0.1-0.7 THz), where most of common materials are transparent, our detectors have excellent responsivity as compared to similar products in the market. They can also boast many other vivid **COMPETITIVE ADVANTAGES**:

- ✓ Uniform pixel-to-pixel sensitivity (pixel-to-pixel deviation < 20%)
- ✓ Standardized and customer-tailored solutions available
- ✓ Customer-friendly, plug-and-play type device
- ✓ Highly competitive low cost
- ✓ EC Certification



Terasense® can easily produce its detectors in large quantities in the form of 2D arrays, as our technology is fully compatible with widely used semiconductor mass production lines!

Specifications

Number of pixels:	1024 (256 x 4)	Effective imaging area:	384 x 12 mm
Pixel size:	1.5 x 1.5 mm ²	Image acquisition rate:	up to 50 fps
Noise Equivalent Power:	1 nW/√Hz	Responsivity:	50 kV/W
Dimensions of device:	440 x 43 x 89 mm	Interface:	mini-USB
Sync out:	+3.3 V, female BNC connector	Power:	5V (USB-powered)
Warranty period:	1 year	Software supplied:	Terasense Viewer ®

TeraSense Inc.

TERASENSE has a strong team of 20 skilled scientists and engineers led by its CEO, Prof. I.Kukushkin, a corresponding member of the Russian Academy of Sciences. Most of the group are young specialists with Ph.D. in the field of microwave and terahertz research. Featuring in over 300 papers, scientific achievements of Terasense researchers have been published in many international scientific peer-reviewed journals.

TeraSense
Sub-THz imaging systems

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