TZcam

Uncooled THz Imager

• Non-Destructive Testing •
• Life Sciences •
• Scientific Instruments •
• Characterization of Sources •

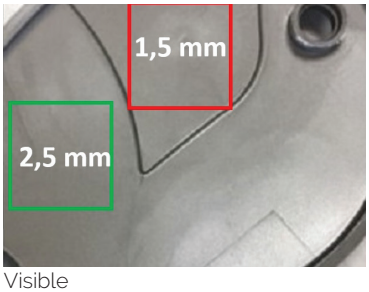
SEE INSIDE THE MATTER SAFELY

Terahertz innovative imaging technology from i2S paves the way to non-destructive testing and to research in the field of terahertz waves.

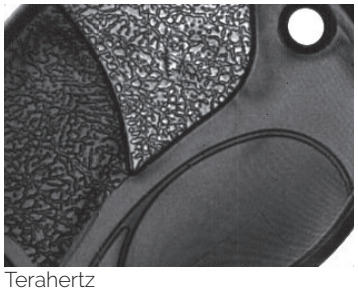
Terahertz innovative imaging technology from i2S paves the way to non-destructive testing of advanced materials used in various industries and for industrial quality control. THz non-hazardous imaging technology reveals previously invisible defects inside the subject matter.

• The i2S non-contact THz penetrating imaging system can detect manufacturing defects or imperfections inside parts during production, in real-time, by seeing through the materials.

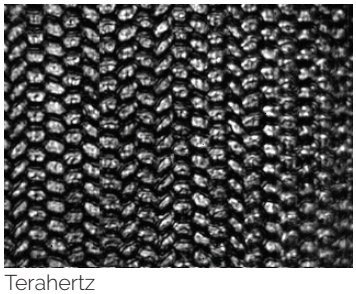
• THz imaging technology is ideal for industries needing to inspect materials such as plastic, ceramic, composites, polymers, wood, cardboard and paper, textile and fibers, and leather.



Visible


Terahertz


Visible

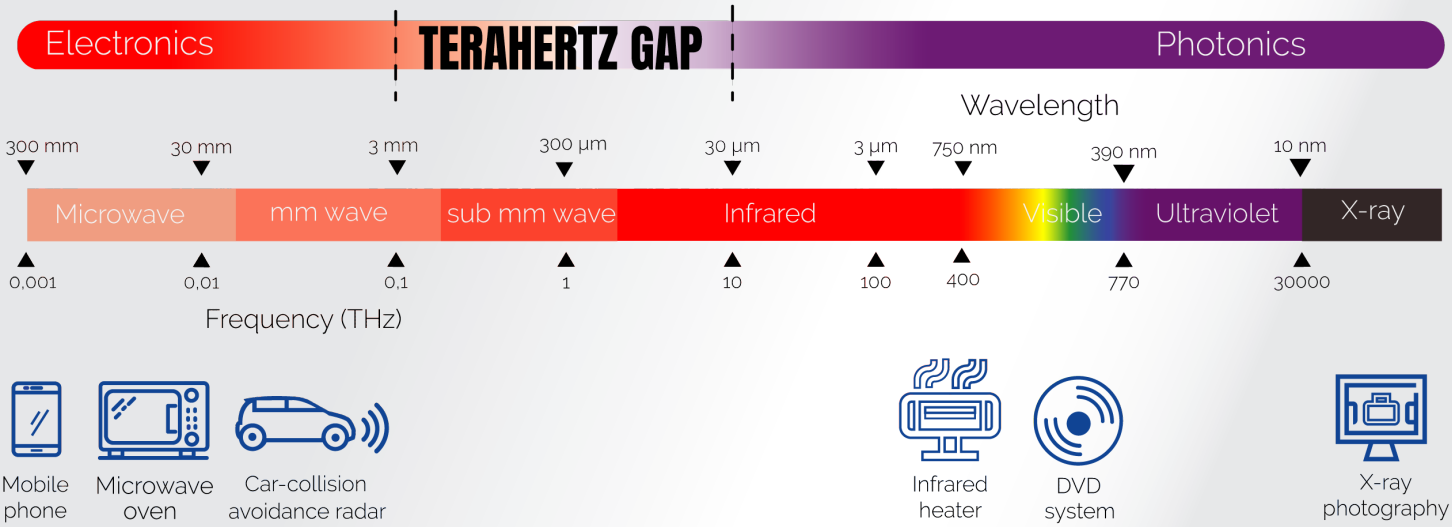

Terahertz

The TZcam is also essential for any Laboratory or R&D institutions that carries out research in the field of THz waves and explores THz potential in various applications: medical imaging, oncology, etc.

Additionally, a wide range of coverage (0.3 THz to 4 THz) combined with an unrivalled bolometric sensor sensitivity makes the TZcam camera a perfect tool for vizualisation/qualification of your terahertz laser source.

THz real-time camera based on antenna-coupled microbolometer 320x240 pixels imager

Spectral range	0,3 – 4 THz (optimized for 1-3 THz)
Sensor	320*240 pixels patented pixel architecture designed by CEA LETI micro-bolometer uncooled technology
Pixel size	50 µm
Frame rate	25 Hz
Sensitivity	20 pw at 2,5 THz
Depth raw data	16 bit
Suply voltage	usb 3.0
Dimensions	119 mm (W) X 126 mm (H) X 63 mm (D)
Weight	camera 840g / objective lens 240g
Magnification	0,25X at 200 mm
Focal length	50 mm
Aperture	F/0.8
Field of view	64 x 48 mm



Located between infrared and microwaves – 100 GHZ to 10 THz electro magnetic waves are non-ionizing waves (i.e safe, non-hazardous for human use). In addition, due to high propagation of THz waves through the air, THz imaging technology is ideal for contactless inspection.

Main Applications

Non-Destructive Testing and Inspection, Research in the THz field, Calibration and Qualification of THz sources, Life Sciences, Scientific Instruments.

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