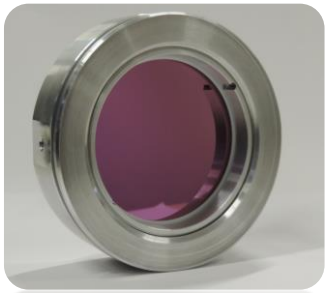
TTC Module,

(THz to Thermal Converter)

From Terahertz to Infrared

TTC Inputs

- Broadening of the spectral range for multispectral analysis including Non-Destructive Testing,
- Thick components analysis,
- Fast acquisition.



Principle of a measurement with a TTC

- Excitation of the target with a THz source,
- Analysis of the transmitted or reflected THz radiation,
- Efficient absorption of incident THz waves and conversion into IR by the TTC,
- Infrared image analysis.

Added value

- CNRS patented technology,
- 20 years of R&D work,
- Compatibility with any kind of hardware and software,
- Low cost technology.

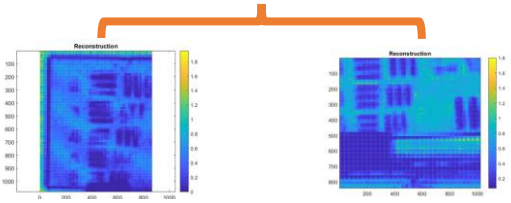


Image with a bolometric camera

Low corner zoom InSb camera

Specifications

- Constant spectral response on IR / THz / Radio ranges,
- Spatial resolution close to wavelength,
- Depending on chosen camera and acquisition time, images of several centimeters objects may be obtained,
- Detectivity threshold / signal-to-noise ratio
  NEP (Noise Equivalent Power) close to 160 $pW.Hz^{-0.5}$ per pixel,

- Depending on the chosen camera,
  - the pitch may be between 15 µm (IR) and 40 µm
  - the maximum resolution may be up to 640 pixels * 512 pixels

- Associated acquisition software compatible with many testing and measurement environments such as LabView, Matlab and Python.

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