

## **THz Imaging Kits**

The INO terahertz kit makes THz imaging easy, whatever your needs. The kit features our camera, which delivers high sensitivity across a wide spectral range, as well as a lens and a 282 GHz or 515 GHz light source with two modes of operation: transmission and reflection.

The user-friendly kit also comes with operating software that allows you to adjust camera settings, calibrate the camera, perform certain image corrections, and more.

## **APPLICATIONS**

- Non Destructive Testing
- Manufacturing
- Security screening and surveillance
- Laboratory experiments
- Concealed weapons detection
- Vision through camouflage
- Quality control, process monitoring
- · Dental and medical imaging
- Food inspection

## BENEFITS

- Includes everything for THz imaging (camera, optics, and a source)
- Can be used in both transmission and reflection modes





## **THz Imaging Kits**

Source Specifications (1)	Kit 0.5 THz	Kit 0.28 THz	Compact Kit 0.5 THz	Compact Kit 0.28 THz
Source Center Frequency <sup>(2)</sup>	0.5 THz	0.28 THz	0.5 THz	0.28 THz
Illumination surface (2)	~ 4.5 x 6 inches		~ 3 x 4 inches	
THz illumination optics	Optimized for beam uniformity at ~ 0.5 THz	Optimized for beam uniformity at ~ 0.28 THz	Optimized for beam uniformity at ~ 0.5THz	Optimized for beam uniformity at ~ 0.28 THz
Output Power	~ 1.25 mW typical	~ 4 mW typical	~ 1.25 mW typical	~ 4 mW typical
Overall Dimensions	25 cm (H) X 44 cm (W) X 40 cm (L)		TBD	
Weight	12.7 kg		TBD	
Others	<ul> <li>Near-flat-top rectangular illumination</li> <li>External housing</li> <li>Form factor of beam matched to fit INO THz sensor</li> <li>United States Patent</li> </ul>			

CAMERA SPECIFICATIONS(1)			
Waveband <sup>(2)</sup>	70 - 3189μm / 4.25 – 0.094 THz		
Sensor <sup>(2)</sup>	<ul> <li>384 x 288 pixels uncooled microbolometer FPA</li> <li>35µm pixel pitch</li> <li>AR coating optimized for specific THz wavelenghts</li> <li>Frame rate of 50 Hz</li> </ul>		
Dimensions	61 mm (H) x 61 mm (W) x 65 mm (L)		
Weight	360g / 0.8 lb (excluding optics)		
Temperature	0 to 40 °C		

OPTICS SPECIFICATIONS <sup>(1)</sup>			
Specifications <sup>(2)</sup>	Ultrafast Optics		
Туре	Refractive		
Focal length	44 mm		
F number	0.7		
Object distance	60 cm to infinity		
Lens material	HRFZ-Si		
Dimensions	80 mm (Ø) 66.5 mm (L)		
Weight	350 g		

<sup>&</sup>lt;sup>1</sup> Specifications subject to change.

<sup>&</sup>lt;sup>2</sup> Specifications can be adapted for specific requirements.