

# THz Illumination

INO offers a terahertz (THz) illumination source especially designed to build a complete THz imaging system when paired with INO's THz camera, the MICROXCAM-384i-THz.

The THz imaging system is used for see-through imaging. Its default configuration is for transmission imaging, where the object under test is placed between the THz source and the THz camera. The system may also be configured to operate in reflection mode.

## APPLICATIONS

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

## BENEFITS

- Can be used in both transmission and reflection modes



# THz Illumination

Specifications <sup>(1)</sup>	Setup @ 515 GHz	Setup @ 282 GHz
Source Center Frequency <sup>(2)</sup>	515 GHz	282 GHz
Illumination surface <sup>(2)</sup>	~ 4.5 x 6 inches	
THz illumination optics	Optimized for beam uniformity at ~ 515 GHz	Optimized for beam uniformity at ~ 282 GHz
Output Power	~ 1.25 mW typical	~ 4 mW typical
Power Supply	110-240 V AC	
Power Consumption	~ 6 - 7 W	
Recommended Operating Temperature	+20°C to +30°C	
Overall Dimensions	25 cm (H) X 44 cm (W) X 40 mm (L)	
Weight	12.7 kg	
Others	<ul style="list-style-type: none"> <li>Near-flat-top rectangular illumination               <ul style="list-style-type: none"> <li>External housing</li> <li>Patent pending</li> </ul> </li> </ul>	

<sup>1</sup> Specifications subject to change.

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

## ADDITIONAL COMPONENTS FOR COMPLETE THz IMAGING SYSTEM

- THz components (camera, objective, computer) can be purchased to build a complete THz system



INO is a world-class center of expertise in industrial applications for optics and photonics, and a leading developer of terahertz solutions.