



# MICROXCAM-384i-THz

## TERAHERTZ CAMERA

### SOLUTION OVERVIEW

The MICROXCAM-384i-THz is a camera based on the sensitive INO 384 x 288-pixel uncooled microbolometer FPA optimized for the terahertz waveband. Due to its longer wavelength, THz band offers unmatched penetration depth for seeing through materials such as fabric, ceramic, plastic, leather, or cardboard. Thus, the camera shows unrivalled sensitivity over a wide spectral range, providing live video images. It features a very small footprint: 61 x 61 x 65 mm

The camera electronics handles raw data acquisition and data transfer over GigE, providing 16-bit raw image outputs at 50 Hz. The camera can be further equipped with ultra-fast 44 mm focal length refractive optics optimized for the THz region.

### TYPICAL APPLICATIONS

- Beam Profiling
- Package inspection
- Manufacturing
- Security screening and surveillance
- Concealed weapons detection
- Vision through camouflage
- Quality control, process monitoring
- Spectroscopy
- Submillimeter astronomy
- Dental and medical imaging
- Food inspection

### BENEFITS

- Wide band response
- High sensitivity
- 16-bit raw data
- High image quality
- Refractive optics available



Visible image Magnetic Card

Visible image of opened card with THz transmission strips

Mosaic of THz image strips taken of sealed card



## CAMERA SEPCIFICATIONS<sup>(1)</sup>

Waveband <sup>(2)</sup>	70 - 3189 $\mu$ m / 4.25 – 0.094 THz
Sensor <sup>(2)</sup>	<ul style="list-style-type: none"><li>• 384 x 288 pixels uncooled microbolometer FPA</li><li>• 35<math>\mu</math>m pixel pitch</li><li>• Silicon float zone window</li><li>• AR coating optimized for specific THz wavelenghts</li></ul>
Frame rate	50 Hz
Video output	GigE Link <ul style="list-style-type: none"><li>• RJ-45 connector</li><li>• 16-bit raw data</li></ul>
Supply	12 VDC Nominal (10VDC to 15VDC)
Power	< 3 W (excluding TEC power)
Dimensions	61 mm (H) x 61 mm (W) x 65 mm (L) 2.4 in. (H) x 2.4 in. (W) x 2.6 in. (L)
Weight	360g / 0.8 lb (excluding optics)
Temperature	0 to 40 °C

## CONTACT US

1 866 657-7406 | [info@ino.ca](mailto:info@ino.ca)

[ino.ca](http://ino.ca)



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**Québec** (Head Office)  
2740 Einstein Street  
Québec (Québec) G1P 4S4  
CANADA  
418 657-7006

**Montréal**  
405 Ogilvy ave, Suite 101  
Montréal (Québec) H3N 1M3  
CANADA  
438 387-8957

**Hamilton**  
175 Longwood Road South, #316 A  
Hamilton (Ontario) L8P 0A1  
CANADA  
905 529-7016

