

# THZ-I-USB

THz Detectors, Integrated USB Module



## KEY FEATURES

- 1 Measure Sources from 0.1 to 30 THz**  
Broadband, room temperature operation, easier to use and less expensive than a Golay cell
- 2 Wide Dynamic Range from nW to mW**  
With state of the art pyroelectric sensors, measure down to 50 nW with 1 nW resolution
- 3 Integrated USB Module**  
Plug the device directly to your PC, no need for an additional PC-Interface
- 4 Powered by your PC**  
No external wiring needed
- 5 Calibrated Devices**  
All THz detectors are calibrated in the 0.25 to 15  $\mu\text{m}$  (20 THz) region
- 6 User-Friendly Software with Many Features**
  - Strip Chart, Statistics and Tuning Needle displays
  - Controls and Power display always visible
  - Tuning Needle display includes min/max indicators
  - Data Logging for long term testing

## AVAILABLE MODELS



THZ2I-BL-USB  
(2 mm-Organic Black)

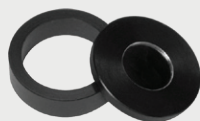


THZ5I-MT-USB  
(5 mm-Metallic)

## ACCESSORIES



Stand with Delrin Post



Removable IR Windows  
(Various types available)



SDC-5000 Digital  
Optical Chopper



Pelican Carrying Case

## SEE ALSO

TECHNICAL DRAWINGS

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# THZ-I-USB

## SPECIFICATIONS



Approved or in the process of being approved\*

MODELS	THZ21-BL-USB	THZ51-MT-USB
MAX AVERAGE POWER	200 mW	200 mW
EFFECTIVE APERTURE	2 mm Ø	5 mm Ø
INTEGRATED MODULE	Digital (USB)	Digital (USB)

### MEASUREMENT CAPABILITY

#### Spectral Range

Frequency	0.1 - 30 THz	0.1 - 30 THz
Wavelength	3000 - 10 µm	3000 - 10 µm
Max Measurable Power	200 mW	200 mW
Noise Equivalent Power	50 nW	100 nW
Rise Time (0-100%)	≤ 0.2s	≤ 0.2s
Calibration Uncertainty	± 5%	± 5%

### DAMAGE THRESHOLDS

Maximum Average Power Density (1064 nm)	50 mW/cm <sup>2</sup>	50 mW/cm <sup>2</sup>
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### PHYSICAL CHARACTERISTICS

Effective Aperture	2 mm Ø	5 mm Ø
Sensor	Pyroelectric	Pyroelectric
Absorber	BL	MT
Analog Output	0-2 V	0-2 V
Dimensions	81.3Ø X 99.3D mm	81.3Ø X 99.3D mm
Weight	500 g	500 g

### ORDERING INFORMATION

Full Product Name	THZ21-BL-USB	THZ51-MT-USB
Product Number	201708	201709

Specifications are subject to change without notice

\* For details, contact your Gentec-EO representative