

## THZ5I-BL-BNC

Terahertz detector with integrated analog module for power measurement up to 140  $\mu$ W.



### PRODUCT FAMILY KEY FEATURES

#### RELATIVE MEASUREMENTS FROM 0.1 TO 30 THZ

Broadband, room temperature operation, easier to use and less expensive than a Golay cell

#### MEASURE POWER FROM nW TO MW

With state of the art pyroelectric sensors, measure down to 100 nW.

#### INTEGRATED ANALOG MODULE

Plug the head directly to your oscilloscope or lock-in amplifier.

#### BATTERY OR AC POWERED

Includes 9V battery and AC power eliminator

#### CALIBRATED AT 0.63 MM

THZ-I-BNC detectors are calibrated at a single wavelength (0.63  $\mu$ m) and include typical wavelength correction data from 0.25 to 440  $\mu$ m. They are used for relative measurements outside that range.

#### COMPATIBLE STAND

[STAND-D-233](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

Maximum average power	62.5 $\mu$ W
Noise equivalent power <sup>1</sup>	1 nW
Spectral range <sup>2</sup>	10 - 3000 $\mu$ m
Frequency <sup>3</sup>	0.1 - 30 THz
Typical rise time	0.2 s
Typical power sensitivity	140 kV/W
Chopping frequency <sup>4</sup>	5 Hz
Analog output	0 - 10 V, BNC
Minimum repetition rate	1000 Hz

1. At 632 nm and a chopping frequency of 5 Hz.

2. Projected spectral range. From 10 to 440  $\mu$ m, spectrometer measurement. From 440 to 3000  $\mu$ m, relative measurement only. This spectral range is subject to change.

3. Projected spectral range. From 10 to 440  $\mu$ m, spectrometer measurement. From 440 to 3000  $\mu$ m, relative measurement only. This spectral range is subject to change.

4. SDC-500 digital optical chopper sold separately

### DAMAGE THRESHOLDS

Maximum average power density	0.05 W/cm <sup>2</sup>
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### PHYSICAL CHARACTERISTICS

Aperture diameter	5 mm
Absorber	BL
Dimensions	81.3 $\emptyset$ X 99.3D mm
Weight	0.5 kg

### ORDERING INFORMATION

THZ5I-BL-BNC	202288
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## INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at [gentec-eo.com/contact-us](https://gentec-eo.com/contact-us)