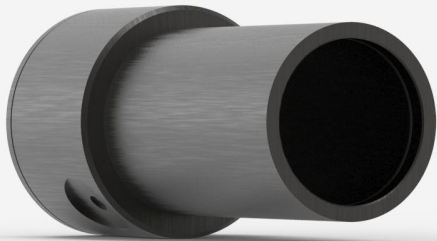




# THZ9D-20MS-BL-D0

THz detector for power measurements up to 20 mW.



## 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

### FLAT SPECTRAL RESPONSE

Get the best precision accross the entire wavelength range.

### MEASURE HIGHER POWERS

Up to 3 W of continuous power with the THZ12D model, the highest in our THz range of products

### LARGE APERTURE

Models range from 9 to 12 mm Ø aperture.

### CALIBRATED AT 10.6 MM

THZ-D detectors are calibrated at a single wavelength (10.6 µm) and include wavelength correction data from 10.6 to 440 µm. They are used for relative measurements outside that range.

### COMPATIBLE STAND

[STAND-D-233](#)



## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

Maximum average power	20 mW
Noise equivalent power <sup>1</sup>	300 nW
Spectral range <sup>2</sup>	10 - 3000 µm
Frequency <sup>3</sup>	0.1 - 30 THz
Typical rise time <sup>4</sup>	0.2 s
Typical power sensitivity <sup>5</sup>	120 V/W
Power calibration uncertainty <sup>6</sup>	±5.0 %
Repeatability	±0.5 %
Chopping frequency <sup>7</sup>	10 Hz
Minimum repetition rate <sup>8</sup>	1000 Hz

1. Nominal value. Actual value depends on electrical noise in the measurement system.
2. From 10 to 440 µm, spectrometer measurement with multiple laser references validation. From 440 to 600 µm, spectrometer measurement only. From 600 to 3000 µm, relative measurement only. This spectral range is subject to change.
3. From 10 to 440 µm, spectrometer measurement with multiple laser references validation. From 440 to 600 µm, spectrometer measurement only. From 600 to 3000 µm, relative measurement only. This spectral range is subject to change.
4. With anticipation.
5. Into 100 kΩ load. Maximum output voltage = sensitivity x maximum power.
6. Including linearity with power.
7. SDC-500 digital optical chopper sold separately
8. Minimum repetition rate for stable average power measurements.

### DAMAGE THRESHOLDS

Maximum average power density	0.05 W/cm²
Maximum energy density	0.1 J/cm²

### PHYSICAL CHARACTERISTICS

Aperture diameter	9 mm
Absorber	BL
Dimensions	38.1Ø x 26.2 mm
Weight	0.09 kg



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ORDERING INFORMATION

THZ9D-20mS-BL-D0

202256

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

## INTERESTED IN THIS PRODUCT?

GET A QUOTE

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