THZ12D-3S-VP-D0

THz detector for power measurements up to 3 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

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-S-233

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power	3 W
Noise equivalent power[1]	0.5 µW
Spectral range[2]	10 - 3000 µm
Frequency[3]	0.1 - 30 THz
Typical rise time[4]	3 s
Typical power sensitivity[5]	200 mV/W
Power calibration uncertainty[6]	±8.0 %
Repeatability	±0.5 %
Thermal drift	12 µW/°C
Minimum measurable power[7]	50 - 100 µW

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. Actual value depends on ambient conditions and the measurement system.

DAMAGE THRESHOLDS

Maximum average power density[1]	30 W/cm²
Maximum energy density	1 J/cm²

1. At 1064 nm, 1 W CW. May vary with wavelength and average power.

PHYSICAL CHARACTERISTICS

Aperture diameter	12 mm
Absorber	VP
Dimensions	73H x 73W x 20D mm (72D mm with tube)
Weight	0.32 kg

ORDERING INFORMATION

THZ12D-3S-VP-D0	202229
THZ12D-3S-VP-IDR-D0	
THZ12D-3S-VP-INT-D0	203029

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