THZ-I-BNC

Touch Screen, Single Channel, Power & Energy Monitor



KEY FEATURES

1. RELATIVE MEASUREMENTS FROM 0.1 TO 30 THz

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

2. MEASURE POWER FROM nW TO μW

With state of the art pyroelectric sensors, measure down to 50 nW with 1 nW resolution

3. INTEGRATED ANALOG MODULE

Plug the device directly into your oscilloscope or Lock-In amplifier

4. BATTERY OR AC POWERED

Includes 9V Battery and AC Power Eliminator

5. CALIBRATED AT 0.63 μm

All THz detectors are calibrated at a single wavelength (0.63 μm) and include typical wavelength correction data from 0.25 to 440 µm. They are used for relative measurements outside that range.

AVAILABLE MODELS



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



THZ5I-BL-BNC (5 mm-Organic Black)

ACCESSORIES



Stand with Delrin Post



(Model Number: 200428)



Removable IR Windows (Various types available)



SDC-500 Digital Optical Chopper

SEE ALSO

TECHNICAL DRAWINGS 132 **ABSORPTION CURVES** 134 LIST OF ALL ACCESSORIES 186

APPLICATION NOTES

THZ MEASUREMENT: PYROELECTRIC VS GOLAY CELL 201924

THZ CALIBRATION 202155

SDC-500 DIGITAL OPTICAL CHOPPER 202154

THZ SETUP 202177

THZ-I-BNC



SPECIFICATIONS

	THZ2I-BL-BNC	THZ5I-BL-BNC
MAX AVERAGE POWER	70 μW	140 μW
EFFECTIVE APERTURE	2 x 2 mm	5 mm Ø
INTEGRATED MODULE	Analog (BNC)	Analog (BNC)

Spectral Range ^a		
Frequency	0.1 - 30 THz	0.1 - 30 THz
Wavelength	3000 - 10 μm	3000 - 10 μm
Max Measurable Power	70 µW	140 µW
Noise Equivalent Power ^b	0.4 nW [4.0 x 10 ⁻¹⁰ W/(Hz) ^½]	1.0 nW [1.0 x 10 ⁻⁹ W/(Hz) ^½]
Rise Time (0-100%)	≤ 0.2s	≤ 0.2s
Sensitivity (Typical) ^b	140 kV/W	70 kV/W
Calibration Uncertainty	Contact Us	Contact Us
AMAGE THRESHOLDS		
Maximum Average Power Density (1064 nm)	50 mW/cm ²	50 mW/cm ²
HYSICAL CHARACTERISTICS		
Effective Aperture	2 x 2 mm	5 mm Ø
Sensor	Pyroelectric	Pyroelectric
Absorber	BL	BL
Analog Output	0-10 V	0-10 V
Dimensions	81.3Ø X 99.3D mm	81.3Ø X 99.3D mm
Weight	500 g	500 g

ORDERING INFORMATION			
Product Name	THZ2I-BL-BNC	THZ5I-BL-BNC	
Product Number	201701		

Specifications are subject to change without notice

a. Projected Spectral Range. From 10 to 440 μ m, spectrometer measurement. From 440 to 3000 μ m, relative measurement only. This spectral range is subject to change.

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