THZ-I-BNC

THz Detectors with integrated analog module

KEY FEATURES

- **COVERS THE ENTIRE THZ SPECTRUM**
  Measure accurately from 0.25 to 15 µm and from 30 THz to 0.1 THz in relative terms
- **MEASURE POWER FROM nW TO µW**
  Make low-level measurements with an NEP of 1.0 nW
- **MEASURE ENERGY FROM nJ TO µJ**
  Can be used with low repetition rate pulsed THz sources to measure pulse energy up to 40 Hz
- **INTEGRATED ANALOG MODULE**
  Plug the device directly into your oscilloscope or Lock-In Amplifier
- **BATTERY OR EXTERNAL POWER**
  Includes 9V battery and an external power supply
- **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.
- **SDC-500 OPTICAL CHOPPER**
  The THZ-I-BNC models require the use of an optical chopper, like our SDC-500, running at 5 Hz.

OUTPUT OPTIONS

- **ANALOG OUTPUT**
  Plug the device directly into your oscilloscope or lock-in amplifier with the BNC output

ACCESSORIES

Stand with delrin post


Removable IR Windows (Various types available)


SDC-500 digital optical chopper


Pelican carrying case

THZ-I-BNC
Specifications

*Also traceable to NRC-CNRC

	THZSI-BL-BNC
MAX AVERAGE POWER	140µW
EFFECTIVE APERTURE	SmmII)
INTEGRATED MODULE	Analog (BNC)
MEASUREMENT CAPABILITY	
Spectral range•	
Frequency	O.I-30THz
Wavelength	3000-10 µm
Max measurable power	140µW
Noise equivalent power'	10 nW M x 10• W/(Hz)½]
Rise time (0-100%)	0.25
Sensitivity (Typical)	70kV/W
Chopping frequency	5 Hz (Required)
Calibration uncertainty	Contact us
Energy mode	
Maximum measurable energy	IOOµJ
Noise equivalent energy	I.OnJ
Minimum pulse width	I.Oµs
Maximum repetition rate	40Hz
DAMAGE THRESHOLDS	
Maximum average power density (1064 nm)	50 mW/cm'
PHYSICAL CHARACTERISTICS	
Effective aperture	SmmII)
Sensor	Pyroelectric
Absorber	BL
Analog output	0-I0V
Dimensions	81.311) X 99.3D mm
Weight	500g
ORDERING INFORMATION	
Compatible stand	STAND-D-233
Product page	

a. Projected spectral range.
From 10 to 440 µm, spectrometer measurement.
From 440 to 3000 µm, relative measurement only.
This spectral range is subject to change.
b. At 632 nm and a chopping frequency of SHz.