

Pyroelectric Detector



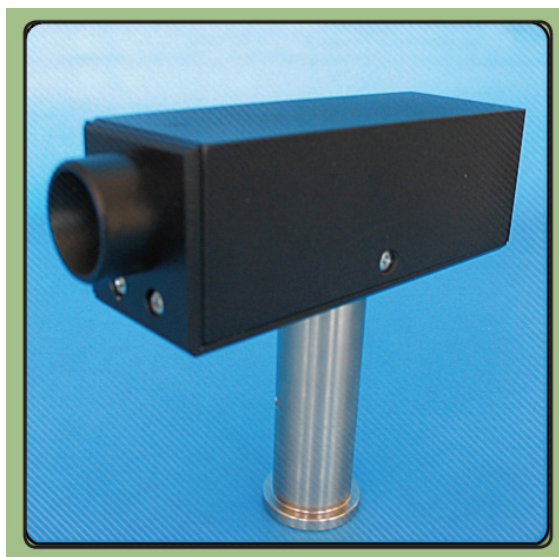
Product Description:

The pyroelectric detector based on LiTaO₃ crystal, is designed for registration of modulated electromagnetic radiation in the millimeter and sub-millimeter wavelength range. At square wave modulation of radiation, the saw-tooth signal voltage from the detector is proportional to the intensity of radiation. A black filter is mounted on the detector input to prevent parasitic illumination in visible and infrared regions. The detector is equipped with a standard BNC connector.

Key features include:

- Spectral range: 0.02 THz - 1.5 THz
- Battery powered for ease of use and portability
- Dynamic range: 10

Transmission Setup:



Product Specifications:

MODEL	OPERATING SPECTRAL RANGE
Operating spectral range	0.02-3 THz
Typical Responsivity	1000 V/W
Dynamic Range	1 μ W - 10 mW
Optimal modulation frequency	5-30 Hz
Noise level 1.0 mV	1.0 mV
Power supply voltage (2 AA batteries)	2 x 1.5 V
Power supply current	0.14 mV
Operating battery lifetime	> 10,000 hours
Dimensions	135 x 40 x 30 m

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Typical Responsivity:

