

DPE12

DPE12 Pyroelectric Infrared Detector

A room-temperature infrared detector assembly with an internal preamplifier and voltage output. Modulated illumination and synchronous detection support scanning infrared measurements.

Best suited to: Mid- and long-wave infrared spectroscopy without cryogenic cooling.



Configuration

Use a modulated signal and select the acquisition time constant with the modulation frequency. Provide the desired wavelength interval when choosing windows and the complete optical path.

Specifications

Published parameters	
Nominal application range	2–12 μm
Active area	2 × 2 mm
Responsivity	$\geq 80,000 \text{ V/W}$
Detectivity	$\geq 3 \times 10^8 \text{ cm} \cdot \text{Hz}^{1/2} / \text{W}$
Frequency response	5–100 Hz; 10 Hz recommended
Operating temperature	–20 to +55 °C
Drive voltage	3 V
Output	Voltage

Measurement features

- Room-temperature pyroelectric sensing.
- Built-in preamplifier.
- Compatible with configured lock-in acquisition.

Configuration note

The source headline uses 2–12 μm , while its table lists 1.5–12 μm . The narrower nominal interval is used for selection.

Full configuration: www.precisometer.com/spectroscopy/spectral-imaging/dpe12