

Hinds' detection systems are specifically designed for use with high frequency optical signals including those generated in Photoelastic Modulator (PEM) applications.

HINDS' DETECTION FEATURES INCLUDE:

- Frequency response of DC to several times the operating frequency of the PEM being used, 450kHz - 1 MHz depending on the model.
- The DET-200 maintains a constant bandwidth throughout all gain settings.
- Gain Selection, 10 positions
- The DET-200 exhibits a constant DC offset throughout all gain settings.
- Offset Voltage (all gain settings), $\pm 5\text{mV}$
- Hi Z load from 0-10V and a 50Ω load from 0-5V
- Optional standoffs to mount precision polarizer mount



PHOTO DETECTOR/ PREAMPLIFIERS

The detector dimensions are 2" x 2" x 1" and have a #8-32 tapped hole for post mounting.

TYPICAL PERFORMANCE

(Model #002, 16mm², photoconductive, Red/IR)

- Power supply, 15 VDC
- Operating Temperature Range, 0°C to 60°C
- Frequency Bandwidth, DC to 1 MHz.
- Spectral Response, 350 to 1100 nm.

DET-200 MODEL OPTIONS

MODEL	TYPE	SPECTRAL RANGE, nm	ACTIVE AREA	FREQUENCY RESPONSE
002	Si-PC	350 - 1100	16 mm ²	DC - 1 MHz
004	Si-PV	350 - 1100	16 mm ²	DC - 1 MHz
006	Si-PC	200 - 1100	20 mm ²	DC - 450 kHz
007	Ge-PC	800 - 1600	3 mm ²	DC - 1 MHz

PC = Photoconductive PV = Photovoltaic

Silicon detector models are available in either photovoltaic or photoconductive versions, and in either red/IR or UV/visible spectral sensitivity. A photovoltaic germanium detector/preamplifier is also available.

GAIN SETTING	dB
0	0
1	8.3
2	12.5
3	15.3
4	17.4
5	19.1
6	20.5
7	21.7
8	22.8
9	23.8



DET-200 shown with optional standoffs for mounting precision polarizer mount.