

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), <math>\pm 5\text{mV}</math>
- ♦ Hi Z load from 0-10V and a 50Ω load from 0-5V
- ♦ Optional standoffs to mount precision polarizer mount

DET-200 OPTIONS

MODEL	TYPE	SPECTRAL RANGE, NM	ACTIVE AREA	FREQUENCY RESPONSE
002	Si-PC	350-1100	16mm <sup>2</sup>	DC-1 MHz
004	Si-PV	350-1100	16mm <sup>2</sup>	DC-1 MHz
006	Si-PC	250-1100	20mm <sup>2</sup>	DC-450 MHz
007	Ge-PC	800-1600	3mm <sup>2</sup>	DC-1 MHz

PC = Photoconductive

PV = Photovoltaic

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

**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, 16mm<sup>2</sup>, 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.

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.

