

# B-DH\_PY Pyroelectric detector (1-30 μm)



## Core benefits

- Extremely wide range of response
- Matched amplifier for optimal operation
- Easy implementation with B-496 DSP lock-in amplifier

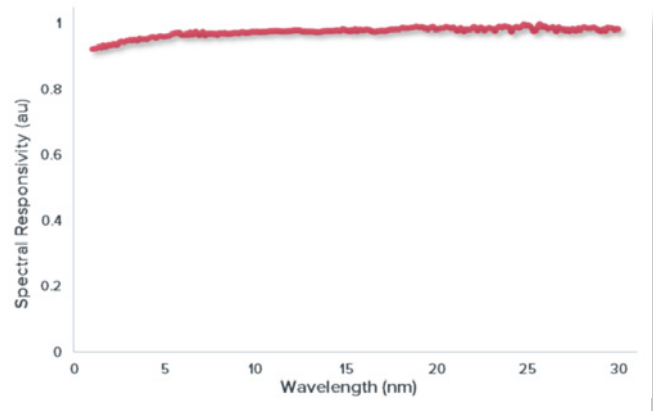
## Features

- Housed pyroelectric sensor (KRS5 window) and integrated amplifier
- Amplifier power supplied by B-DH\_PY\_PSU module
- Operated in AC mode
- Compatible with Bentham's entire range of monochromators and accessories
- Suitable for free standing applications
- Recommended for use with B-400 series detection electronics

The B-DH\_PY pyroelectric detector offers an exceptionally wide responsivity range, reaching parts of the infrared for which no photon detectors are available.

Housing a 2x2 mm active area pyroelectric detector fitted with a KRS5 window (1-30 μm), the B-DH\_PY includes an integrated impedance matching amplifier. The amplifier is powered by the B-DH\_PY\_PSU module. The signal generated is best measured in using the B-496 DSP lock-in amplifier.

The mounting flange supplied with the B-DH\_PY is compatible with the entire range of Bentham monochromators and accessories.



Specifications	
Electro-optical	
Material	Deuterated lanthanum $\alpha$ -alanine doped triglycine sulphate (DLaTGS)
Active area	2x2 mm
Window material	KRS5
Spectral response range	0.6-40 μm
Operating-mode	Pyroelectric
Responsivity (typ.)	1750 V.W <sup>-1</sup>
D* (typ.)	1.15x10 <sup>9</sup> cm√Hz.W <sup>-1</sup>
Max. operating temperature	-20 to +55 °C
Recommended chopping frequency	15 Hz
Mechanical	
Connector	Amphenol
Compatibility	Four M3 clearance holes (Bentham slit pattern)

Ordering information	
B-DH_PY	Pyroelectric spectral responsivity standard
B-DH_PY_PSU	Power supply module for DH_PY