

DH_PY Pyroelectric Detector (1-30 μ m) Brochure



Overview

The DH_PY DLATGS pyroelectric detector offers an exceptionally wide responsivity range, reaching parts of the infrared for which no photon detectors are available.

Housing a 2x2mm active area pyroelectric detector fitted with a KRS5 window (1-30 μ m), the DH_PY includes an integrated impedance matching amplifier. The amplifier is powered by the DH_PY_PSU module. The signal generated is best measured in using the 496 DSP lock-in amplifier.

The mounting flange supplied with the DH_PY is compatible with the entire range of Bentham monochromators and accessories.

Core benefits

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

Features

- ◆ Housed pyroelectric sensor (KSR5 window) and integrated amplifier
- ◆ Amplifier power supplied by 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 400 series detection electronics

DH PY Pyroelectric Detector (1-30 μ m)**Electro-optical**

Material	Deuterated lanthanum α -alanine doped triglycine sulphate (DLaTGS)
Active area	2x2mm
Window material	KRS5
Spectral response range	0.6-40 μ m
Operating mode	Pyroelectric
Responsivity (typ.)	1750 V.W-1
D* (typ.)	1.15x10 ⁹ cm \sqrt Hz.W-1
Max. operating temperature	-20 to +55 $^{\circ}$ C
Recommended chopping frequency	15 Hz

Mechanical

Connector	Amphenol
Compatibility	Four M3 clearance holes (Bentham slit pattern)
Dimensions	

Wavelength vs Spectral Responsivity

