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DH_PY Pyroelectric Detector (1-30µm) 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 (1-30µm), 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	<u>Features</u>
✓ Extremely wide range of response	Housed pyroelectric sensor (KSR5
\checkmark Matched amplifier for optimal operation	window) and integrated amplifier
✓ Easy implementation with 496 DSP lock-	• Amplifier power supplied by
in amplifier	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

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Electro-optical

Material	Deuterated lanthanum α-alanine doped triglycine sulphate (DLaTGS)
Active area	2x2mm
Window material	KRS5
Spectral response range	0.6-40µm
Operating mode	Pyroelectric
Responsivity (typ.)	1750 V.W-1
D* (typ.)	1.15x109 cm√Hz.W-1
Max. operating temperature	-20 to +55°C
Recommended chopping frequency	15 Hz

Mechanical

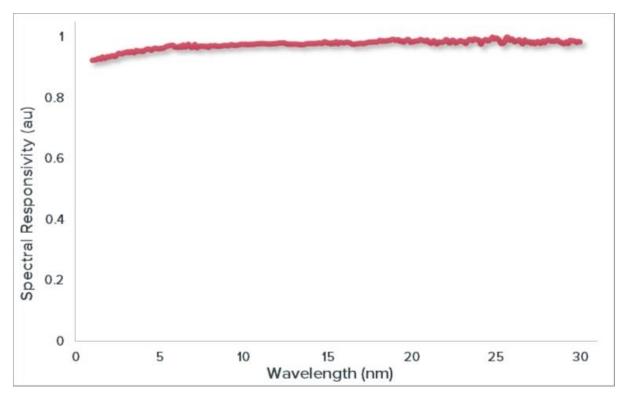
Connector	Amphenol
Compatibility	Four M3 clearance holes (Bentham slit pattern)
Dimensions	

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Wavelength vs Spectral Responsivity



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