

## DH Ge Photodiode (800-1800nm) Brochure



### Overview

The Bentham DH\_Ge germanium photodiode provides excellent linearity and responds to longer wavelengths than InGaAs detectors in DC operation. Housing a 5mm diameter active area germanium photodiode (800-1800nm), the DH\_Ge is operated in the photovoltaic mode.

The photocurrent generated by this detector is best measured using the 487 picoammeter or the 477-pre-amplifier followed by the 496 lock-in amplifier. The mounting flange supplied with the DH\_Ge is compatible with the entire range of Bentham monochromators and accessories.

#### Core benefits

- ✓ Offers excellent linearity and low noise
- ✓ Spectral coverage (800-1800nm)
- ✓ Excellent dynamic range when used with 400 Series of detection electronics
- ✓ Compatible with the entire range of Bentham monochromators and accessories

#### Features

- ◆ 5mm diameter active region Germanium detector
- ◆ Operated in either the DC or AC regimes
- ◆ Compatible with Bentham's entire range of monochromators and accessories
- ◆ Suitable for free standing applications
- ◆ Recommended for use with 400 series detection electronics

## **DH Ge Specifications**

### **Electro-Optical**

Material	Germanium
Active area	5mm diameter
Spectral response range	800-1800nm
Operating mode	Photovoltaic
Dark current (typ.)	<1pA
Shunt resistance (typ.)	15k $\Omega$
Peak wavelength (typ.)	1500nm
Peak responsivity (typ.)	0.90 A.W-1
NEP	1.5 x 10-12 W.H-1/2
Max. operating temperature	-20 to +60°C

### **Mechanical**

Connector	BNC
Compatibility	4 x M3 clearance holes in Bentham slit pattern
Dimensions	80L x 50W x 18H (mm)

## Wavelength vs Responsivity

