

DH_50 Cooled Multi-Alkali Photomultiplier (200-930nm) Brochure



Overview

The DH_50 photomultiplier uses temperature control to reduce dark current and extend spectral range of the S20 photocathode. Housing an end-window multi-alkali (S20 photocathode) photomultiplier tube, a mu-metal shield and a PCB based dynode chain, reliable operation can be ensured. Peltier elements, powered by the CPS50 ensure temperature control.

The 215 high voltage supply module maintains the photocathode at a negative high voltage. 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 quick-change mounting flange supplied with the DH_50 is compatible with the entire range of Bentham monochromators and accessories.

Core benefits

- ✓ Optimised performance for the most challenging measurements
- ✓ High sensitivity and excellent linearity
- ✓ Spectral coverage 200-930nm
- ✓ Stable operating temperature and reduced dark current

Features

- Housed photomultiplier tube featuring mumetal shield and PCB dynode chain
- Peltier-based cooling
- Hermetically sealed housing with quartz window
- Operated in either the DC or AC regimes
- Compatible with Bentham's entire range of monochromators and accessories
- Recommended for use with 400 series detection electronics



DH_50 Cooled Multi-Alkali

Electro-Optical

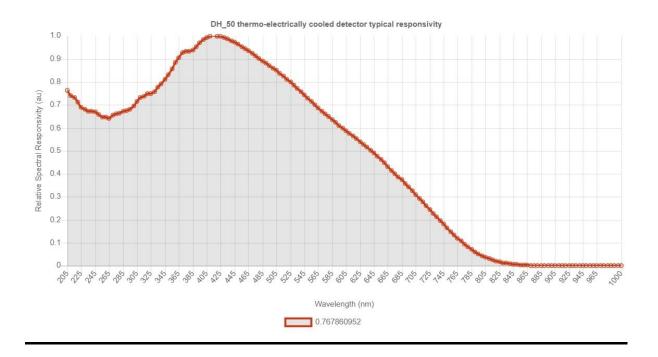
S20
20mm diameter,
UV Glass
9
Linear: $750 \text{ k}\Omega$ Pulse Counting: $3.92 \text{ M}\Omega$
Photoemmisive
200-900nm
420 nm
1pA at 750V and -20°C
1.3 x 10-16 W.Hz-1/2
-20°C to +20°C
1250V DC
100μΑ
-30 to +50°C

Mechanical

Connector	BNC/HV-BNC
Compatibility	Supplied with a quick-change interface plate, 4 x M3 clearance holes (Bentham slit pattern)
Dimensions	



Wavelength vs Relative Spectral Responsivity



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