DH_3_BI Bi-Alkali End-Window Photocathode (200-600nm) Brochure

Overview

The DH_3_BI is ideal for low light-level applications in the UV providing high sensitivity with low dark current. Housing an end-window bi-alkali (KCs photocathode) photomultiplier tube, a mu-metal shield and a PCB based dynode chain, reliable operation and excellent linearity can be ensured. The 415 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 mounting flange supplied with the DH_3_BI is compatible with the entire range of Bentham monochromators and accessories.

Core benefits	Features
✓ Detector of choice for low light-level applications in the UV ✓ Spectral coverage 200-600nm ✓ High sensitivity and excellent linearity ✓ Low dark current	◆ Housed photomultiplier tube featuring mu-metal shield and PCB dynode chain ◆ 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_3_BI Bi-Alkali Specifications

Electro-optical

Photocathode	KCs
Active area	20mm diameter
Window material	Fused silica
Number dynodes	10
Dynode chain resistance	Linear: 750 kΩ Pulse Counting: 3.92 MΩ
Operating mode	Photoemmisive
Spectral response range	200-600nm
Peak wavelength (typ.)	350nm
Dark current (typ.)	50pA at 750V
NEP	1 x 10-16 W.Hz-1/2
Max. high voltage	2000V DC
Max. anode current	100µA
Max. operating Temperature	-30 to +60°C

Mechanical

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