BENTHAM

DH-3 Photomultiplier Tube

End-window multi-alkali detector

DH-3 PMT
End-Window Multi-Alkali Detector

For low light-level applications, such as the measurement of spectral irradiance, the photomultiplier is an indispensable spectroradiometer component.

The DH-3 photomultiplier, consisting of a housed end-window multi alkali (S20 photocathode) is the detector of choice for such measurements over the UV-Visible region.

The DH-3 is supplied with interface plate for mounting to the entrance port of any Bentham monochromator.

The housing also contains a PCB-based dynode chain for reliable operation and exceptional linearity.

The tube is surrounded by a mu-metal shield to mitigate the effect of external magnetic fields on the performance of the device.

The high voltage required to operate the device is derived from the Bentham 415 high voltage supply. The photocathode is maintained at negative high voltage such that the anode be a ground potential for adaption to any transimpedance current amplifier, such as the Bentham 487.

DH-3 fitted to DMc150 monochromator

DH-3 Specifications	
Type	End Window PMT housing
Spectral range of Operation	200-900nm
Peak sensitivity wavelength (typ.)	420 nm
Dark current ID (typ.)	500pA at 750V
Typical Dark Current	100pA
Temperature Stability:	Up to ±1%/ ºC at beyond 800nm
Photosensitivity vs. temperature	Up to 1%/ °C at band edge
Number dynodes	10
Minimum effective area	xxx
Max operating temperature	xxx
Envelope material	xxx
Maximum anode current	0.1mA / 100µA
Dynode chain resistance	Linear: 750 kΩ, Pulse Counting: 3.92
Maximum anode current	100µA