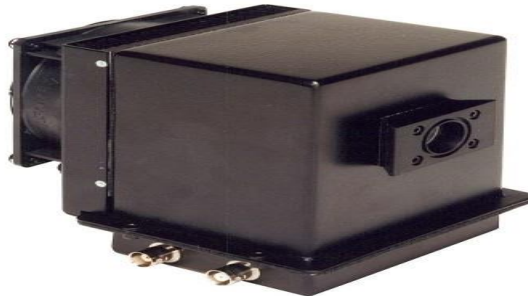


DH_30_TE Cooled Multi-Alkali Photomultiplier (200-900nm) Brochure



The DH_30_TE photomultiplier is an economical solution for low light-level applications throughout the UV-vis and into the NIR. Housing a side-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 CPS1/CPS1M 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_30_TE is compatible with the entire range of Bentham monochromators and accessories.

Core benefits

- ✓ Economical choice for UV-vis-NIR low light level applications
- ✓ High sensitivity
- ✓ Spectral coverage 200-900nm
- ✓ Stable operating temperature and reduced dark current

Features

- ◆ Housed photomultiplier tube featuring mu-metal 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-30-TE Cooled Specifications

Electro-optical

Photocathode	S20
Active area	20x8mm
Window material	UV Glass
Number dynodes	9
Dynode chain resistance	Linear: 750 k Ω Pulse Counting: 3.92 M Ω
Operating mode	Photoemissive
Spectral response range	200-900nm
Peak wavelength (typ.)	420 nm
Dark current (typ.)	1pA at 750V and -20°C
NEP	1.3 x 10 ⁻¹⁶ W.Hz ^{-1/2}
Range of temperature control	-20°C to +20°C
Max. high voltage	1250V DC
Max. anode current	100 μ A
Max. operating Temperature	-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

