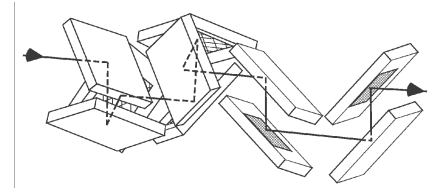




## HH10-S1337 Ten-element transmission photodetectors

◀ 10 element detector with protective window-cap  
principle beam journey ▶



In general, ten-element transmission trap detector consists of 6- and 4-element photodetectors mounted optically in series. Our design yields in extremely low output beam – 100000 times less optical power than in input beam. By rotating the device around horizontal axis, the optical power in the transmitted beam can, additionally, be attenuated about 20 times. The predicting and interpolation capabilities of the transmittance and the responsivity are well-maintained due to use of quality photodiodes in the device. The 10-element photodetector is useful for measurements of optical power where high attenuation and analysis of transmitted beam are required

Parameter	Detector Model <b>HH10-S1337</b>	Notes
Active area [mm <sup>2</sup> ]	46	
Spectral range [nm]	360–950	
Spectral responsivity [mA/mW]	0,35–0,7	Depends on wavelength, almost linear up to 950 nm
Quantum efficiency	0,9980–0,9999	Incl transmittance
Calibration relative uncertainty [%]	0,5	Responsivity calibration
Maximum optical power density [mW/cm <sup>2</sup> ]	5	
Full field of view [°]*	7	
Optical path length in the device [mm] *	141	Distance from the first reflection to the last reflection 125 mm
Maximum declination between incoming and transmitted beams [°]	1	
Maximum transmittance [% of incoming beam]**	0,15	@360 nm, depends on polarisation
Minimum transmittance [% of incoming beam]**	0,0001	@950 nm, depends on polarisation
Spatial uniformity of the responsivity [%]	±0,1	Scanned @ 632,8nm
Spatial uniformity of the transmittance [%]	±2	Scanned @ 632,8nm
Dimensions (approx):*		
Diameter [mm]	75	Dimensions and type of electrical connector upon customer specifications
Length [mm]	72	
Weight (approx)[kg]	0,4	

\*The given values are illustrative may depend on the customer specified features of photodetector

\*\*The values are given for detector modeled as a photodiode with antireflection coating effective thickness 30 nm