



Technical Help Light

UVA, UVB & UVI Light Sensor Specifications

	UV-A (SKU 420) •	UV-B (SKA 430)	UV-I (SKA 440)
Spectral Response	-See Graph-	-See Graph-	-See Graph-
Detector	GaAsP Photodiode	SiC Photodiode	Filtered SiC Photodiode
Working Range	0-200 Wm ⁻²	0-20 Wm ⁻²	0-20 Wm ⁻²
Filter	Optical Glass	N/A	N/A
Construction	Anodised Black Aluminium, IP68 (fully waterproof - submersible to 4m)		
Sensor	Cosine-Corrected head. Specially formulated diffuser		
Cable¹	Screened - 7-1-4-C military Specification. 2M		
Temperature Range	-30°C to +60°C		
Humidity Range	0-100% R.H.		
Thermal Drift	0.075mV °C ⁻¹		
Longterm Stability³	+/-2%		
Response Time⁴	<50ms		
Cosine Error⁵	<3%		
Azimuth Error⁶	<1%		
Absolute Calibration Error	Typical <3%, max. 5% (Traceable to NPL)		
Dimensions	69mm x 34mm x 34mm		
Weight	200g (with cable)		
Thermal Drift of Zero Offset	+/- 0.03mV °C ⁻¹		
Output Impedance	500Ω		
Power Supply⁷	5 - 15V D.C		
Linearity (0 - 1V)⁸	Better than 1%		

THESE VALUES ARE BASED ON WORST CASE/MAXIMUM VALUES

Notes

- 1 Standard length is 2m. Longer/Shorter cables available if required.
- 2 Approximate value only. Working range is well within maximum levels expected in full sunlight
- 3 Maximum change in one year. Calibration check recommended
- 4 Generally less than 50ms. May increase slightly with longer cables.
- 5 Cosine error to 80° is typically 5% max. Figures for normal use sources (e.g. sun + sky, diffuse sun, growth chambers etc.)
- 6 Measured at 45° elevation over 360°
- 7 On standard models.
- 8 With 9V power supply

*Please note, the SKU 420 has now been replaced with the SKU 421

*Working Range values are approximate values only.

Version 1.1

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