

# LIGHT

## Sensors for Environmental Control

- Accurate, calibrated sensors
- Lux, UV or PAR response
- Ideal for control of artificial lighting
- Essential for audit checks of lamp efficiency
- Low cost



Skye Instruments are world renowned for the manufacture of high quality light and radiation sensors for both indoor and outdoor use.

The range of sensors for environmental control applications are calibrated to National Standards as are all Skye sensors, but have a lower level of waterproofing than the outdoor range resulting in a more economical cost.

Sensors are compatible with

environmental controllers and can be used to monitor and control artificial or supplementary lighting, or to control shading screens where too much light is a problem.


The calibrated sensors can also be used as part of quality audits to check on lighting efficiencies, monitoring to decide optimum times to replace lamps or clean reflectors.

Environmental Control sensors are available to measure light

in Lux for human or animal use, PAR for plant and crop applications, or ultraviolet radiation in the UV-A or UV-B wavebands. Please ask for a datasheet on the outdoor range of sensors to see the exact response curves for each version.



## SPECIFICATIONS

Dimensions & weight	Construction	Cable	Sensor	Detector	Filters	Output Signal	Zero offset range	Working range (1)	Linearity (0-1v with 9v power supply)
 34mm 50mm 150g (with 3m cable)	Material Dupont 'Delrin' sealed to IP64	Screened cable	Cosine corrected head	Photocell	Optical glass	1,2,3,4, or 5 volts up to 10V full scale	Each sensor is calibrated individually	PAR - 0-3000 $\mu\text{mols/m}^2/\text{sec}$ Lux - 0-500kLux UVA 0-100W/m <sup>2</sup> UVB - 0-5W/m <sup>2</sup>	Better than 1%
Absolute calibration error (2)	Thermal drift of output (-20 to +50°C)	Thermal drift of zero offset (-20 to +50°C)	Longterm stability (3)	Response time (4)	Output impedance	Operating range	Power supply requirements		
Typical <3% max 5%	0.025mV/°C Max	Typically 0.01 mV/°C	±2%	Better than 10mS	500Ω	-20°C to +70°	0-100% RH	<b>Full Scale</b> 1,2 & 3 volts 4 volts 5 volts 10 volts	<b>Voltage</b> 5-15volts 7-15volts 9-15volts 12-15volts

## NOTES ON SPECIFICATIONS

- (1) All Skye sensors will work at levels of irradiance well above that found in terrestrial sunlight conditions, room or growth chamber lighting
- (2) Main source of this error is uncertainty of calibration of Reference Lamp. Skye calibration standards are directly traceable to N.P.L. standard references.
- (3) Maximum change in one year. Calibration check recommended at least every two years. Experience has shown that changes are typically much less than figures quoted
- (4) Times are generally less than the figure quoted, which is in milliseconds. They may be slightly increased if long leads are fitted, or those of a higher capacity cable

## ORDERING INFORMATION

Sensor Type	Order Code	Use
PAR	SKP 212	Response 400-700nm. For use with any light source
Lux	SKL 315	Conforms to CIE (human eye) photopic curve. For use with any light source
UVA	SKU 425	Response 320-380 (FWHM) for use with UVA lamps only
UVB	SKU 435	Response 280-315 (FWHM) for use with any light source.

### Accessories

SKM 221	Levelling unit
SKL 904	SpectroSense2 4 channel display meter
SKL 908	SpectroSense2 8 channel display & logging meter

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