



LIGHT

Light Meter for Quality Assurance

- **Ideal for controlled environment chambers**
- **Plant growth rooms or photostability cabinets**
- **Essential for audit checks of lamp outputs**
- **Indispensable for uniformity measurements**
- **Accurate, calibrated sensors and meter**
- **Lux, UV or PAR response**



Photographs courtesy of Weiss Gallenkamp and IGER

Skye Instruments are world renowned for the design and manufacture of high quality light and radiation sensors for both indoor and outdoor use. Since 1983 much development time has been invested to produce sensors which meet expected and published spectral responses, and all are individually calibrated and traceable to National Standards (National Physical Laboratory, UK).

The SpectroSense2 meter system for Controlled Environments is ideal for quality control audits to check actual light levels and the uniformity of these levels throughout the cabinet or chamber.

It is also useful for monitoring the

efficiency of the lighting equipment itself by recording individual lamp outputs over time to decide optimum intervals for replacing bulbs or tubes, or cleaning the reflectors and diffusers.

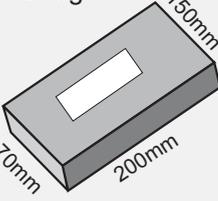
Controlled Environment sensors are available to measure light in Lux for human or animal use, PAR for plant and crop applications, or ultraviolet radiation in the UV-A or UV-B wavebands for photostability studies. UV-A sensors are usually filtered for use under UV lamps only, but can be adjusted for use under all light sources if required. Please ask for datasheets on the outdoor range of sensors to see the exact response curves for each version. All sensors can be scaled to

suit your own range of lighting levels, offering maximum resolution of measurement.

The SpectroSense2 multichannel meter will display calibrated light measurements from up to 4 sensors simultaneously, whilst having a 'library' in memory of up to 16 sensors for easy interchange between sensors. There are ratio functions for displaying relative light intensities between sensors, and a Hold button for freezing the 4 line display while reading. The SpectroSense2+ meter version also has logging features for automatic recording over time.



SPECIFICATIONS - Meter

| Operating range | Construction | Dimensions & Weight | Power | Modes |
|-----------------------------|--|---|--|---|
| -20°C to +70°C 0-100% RH | Black ABS, sealed to IP54 Binder subminiature connectors 20 x 4 line LCD membrane keypad | 700g  | 1 x miniature 9 volt / MN1604 / 6LF22 Battery life 60 hours | SpectroSense2 a) 4 sensor / channel display b) Ratios display c) Integration display d) Set up mode SpectroSense2+ As above plus e) 8 channels f) logging functions g) PC connection |

SPECIFICATIONS - Sensors

| Operating Range | Construction | Dimensions & Weight | Detectors & Filters | Working range (1) |
|-------------------------------|--|---|-----------------------------|---|
| -20°C to +70°C 0 - 100% RH | Material Dupont 'Delrin' sealed to IP64 Cosine corrected head Screened cable |  150g (with 3m cable) | Photocell and Optical Glass | Each sensor is calibrated individually to National Standards (2) PAR - 0-3000 $\mu\text{mol m}^{-2} \text{s}^{-1}$ Lux - 0-200 kLux UVA - 0-100 W m^{-2} UVB - 0-5 W m^{-2} |

FURTHER INFORMATION

(1) All Skye sensors will work at levels of irradiance well above that found in terrestrial sunlight conditions, room or growth chamber lighting, but can be scaled individually as required.

(2) Calibration check recommended at least every two years.

Further information on using and monitoring lighting in controlled environments can be found on the website of the UK Controlled Environments Users Group:

<http://www.fbs.leeds.ac.uk/ceug/index.htm>

ORDERING INFORMATION

| Sensor Type | Order Code | Use |
|------------------|--------------------|---|
| PAR | SKP 217/SS2 | Response 400-700nm. For use with any light source |
| Lux | SKL 312/SS2 | Conforms to CIE (human eye) photopic curve. For use with any light source |
| UVA | SKU 425/SS2 | Response 320-380 (FWHM) for use with UVA lamps only |
| UVA | SKU 426/SS2 | Response 320-380 (FWHM) For use with any light source. |
| UVB | SKU 435/SS2 | Response 280-315 (FWHM) for use with any light source. |
| Meters | SKL 904 SKL 908 | SpectroSense2 display meter SpectroSense2+ logging meter |
| Accessory | SKM 221 | Levelling unit - advisable for keeping light sensors level |

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