LIGHT

1 Channel Custom Sensor

- Custom wavelength response between 280 - 1100 nm
- Broadband or narrow band
- Ideal for long term datalogging
- Fully weatherproof
- Submersible to 4m depth

Skye Instruments have been designing and manufacturing specialist light and radiation sensors since 1983.

This range of sensors has ten standard responses including total solar radiation, PAR or Photosynthetically Active Radiation, Lux, UV and Red / Far-red sensors.

For specific applications Skye also offer 1, 2 and 4 channel sensors where the user can choose the wavelength response between 280 and 1100 nm, in bandwidths from 5nm up to broadband.

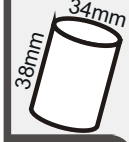
The 1 channel custom light sensor has the same cosine corrected construction as Skye's standard sensors, and is fully waterproof to 4m depth.

Each sensor is individually calibrated traceable to the UK's National Physical Laboratory and is supplied with a Calibration Certificate and Response Curve.

Calibrated measurements can be made in natural solar conditions or under any artificial light source

These sensors are ideal for use with the Skye SpectroSense2 meter or DataHog logger. They are also available in a variety of outputs to suit most dataloggers and controllers.

SKS 1110 SPECIFICATIONS

Dimensions	Weight	Construction	Cable	Sensor	Detector	Filters	Sensitivity -current (1)	Sensitivity -voltage	Working range (2)
	130g. (with 3m cable)	**Material Dupont 'Delrin' fully sealed to IP68**	**3m 2 core screened DEF std 61-12/4.5**	Cosine corrected head	Photo-diode	**Dependant on individual response**	**µA Wavelength Dependant**	**MV Wavelength Dependant**	**Dependant on individual response**

Linearity error	Absolute calibration error (3)	Cosine error (4)	Azimuth error (5)	Temperature coefficient	Longterm stability (6)	Response time (7) - voltage output	Internal resistance - voltage output	Temperature range	Humidity range
<0.2%	Typ. <3% 5% max.	3%	<1%	±0.2%/°C	±2%	10ns	C.200 ohms	-30 to + 75°C	0-100% RH

NOTES ON SPECIFICATIONS

(1) Current output varies from sensor to sensor. Each individual unit will have a slightly different output. A calibration certificate is supplied with each sensor

(2) All Skye sensors will work at levels of irradiance well above that found in terrestrial sunlight conditions, room or growth chamber lighting

(3) Main source of this error is uncertainty of calibration of Reference Lamp. Skye calibration standards are directly traceable to N.P.L. standard References.

(4) Cosine error to 80º is typically 5% max. Figures shown are for normal use sources, e.g., sun plus sky, diffuse sun, growth chambers, etc.

(5) Measured at 45º elevation over 360º

(6) 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

(7) Times are generally less than the figure quoted, which is in nanoseconds. They may be slightly increased if long leads are fitted, or those of a higher capacity cable

RESPONSE CURVE

Each sensor is supplied with its individually calibrated wavelength Response Curve

ORDERING INFORMATION

Sensor

SKP 218	1 Channel sensor

Accessories

SKM 221	Leveling unit
SKM 226	Long arm pole/wall mount

Meters and dataloggers

SKP 200	Display meter
SKL 904	SpectroSense2
SKL 908	SpectroSense2+
SDL 5000 series	DataHog datalogger

Skye Instruments Ltd
21, Ddole Enterprise Park
Llandrindod Wells
Powys LD1 6DF
United Kingdom

TEL +44 (0)1597 824811
FAX +44 (0)1597 824812

EMAIL skyemail@skyeinstruments.com
WEB http://www.skyeinstruments.com