



HOPL - High Output Light Sensors

Skye Instruments have been specialising in light and radiation sensors since 1983. All are designed, manufactured and calibrated to the highest standards. Each is supplied with a Calibration Certificate traceable to the UK's National Physical Laboratory (NPL).


This range of sensors from Skye permit collection of data using a wide variety of industrial loggers and P.L.C.s. The SKL 2600 range is designed to meet requirements of Computers, Laptops and PLC's, giving linear, high level outputs with minimal power requirements.

The HOPL range is built using the quality components and experience gained on our standard range, but in addition incorporate amplifiers to give full scale outputs of 1, 2, 3, 4, 5 or 10 volts or alternatively 4-20mA. The sensors are available in various versions for different applications.

The most commonly used sensors are the Lux and Pyranometer sensor. The Pyranometer would, for example, be used with the PC to determine solar energy input in watts. We offer a range of other sensors to accommodate specialist needs and often we can produce sensors for individual requirements at little or no extra cost.



HOPL SPECIFICATIONS

Dimensions & weight:	200g with 3m cable		Cosine error (2):	3%
Construction:	Anodised aluminium/Delrin. Sealed to IP67		Azimuth error (3):	<1%
Cable:	Screen cable 7-2-2c		Temperature coefficient:	+/- 0.1%/°C
Sensor:	Cosine corrected head		Longterm Stability (4):	+/- 2%
Detector:	Silicon photocell		Response Time (5):	50ms
Filters:	Dependant on sensor type		- Voltage Output	
Sensitivity - current:	4-20mA		Internal Resistance:	See individual datasheets
Sensitivity - Voltage:	1/2/3/4/5 volts up to 10v full scale		- Voltage Output	
Working Range:	See individual datasheets.		Operating Range:	-20°C to +70°C, 0-100% RH
Absolute:	type <3% max 5%		Power Supply requirements:	
Calibration error (1)			Full Scale	Voltage
			Up to 2 volts	5 - 15 volts
			Up to 5 volts,	9-15 volts
			Up to 10 volts	12-15 volts
			4-20mA	12-36 volts

NOTES ON SPECIFICATIONS

- (1) Main source of this error is uncertainty of calibration of Reference Lamp. Skye calibration standards are directly traceable to N.P.L. Standard references.
- (2) Cosine error to 80° is typically 5% max. Figures shown are for normal use sources, e.g., sun plus sky, diffuse sun, growth chambers, etc.
- (3) Measured at 45° elevation over 360°
- (4) Maximum change in one year. Calibration check recommended at least every two years. Experience has shown that changes are typically less than figures
- (5) 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

VOLTAGE OUTPUT SENSORS

SKL 2610	HOPL PAR Special
SKL 2620	HOPL PAR Quantum
SKL 2633	HOPL Lux sensor with fully screened aluminium housing
SKL 2640	HOPL PAR Energy
SKL 2650	HOPL Silicon Cell Pyranometer
SKL 2660	HOPL Customised Single Channel

CURRENT OUTPUT SENSORS

SKL 2615	HOPL PAR Special
SKL 2625	HOPL PAR Quantum
SKL 2638	HOPL Lux sensor with fully screened aluminium housing
SKL 2645	HOPL PAR Energy
SKL 2655	HOPL Silicon Cell Pyranometer
SKL 2421	HOPL UVA sensor
SKL 2430	HOPL UVB Sensor

ACCESSORIES

SKM 222	Levelling Unit
SKM 226	Long Arm Bracket

Skye Instruments Ltd

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

TEL: +44 (0)1597 824811 EMAIL: skyemail@skyeinstruments.com WEB: www.skyeinstruments.com