

LIGHT

High Output Sensors

- Amplified sensors for use with PLCs and industrial loggers
- Sensors to suit most applications. Choose from:- Quantum, Par, Energy, Pyranometer and Lux.
- Choice of outputs, voltage or 4-20mA
- High specification, quality sensors

This new range of sensors from Skye permit collection of data using PCs and a wide variety of industrial loggers and P.L.C.s.

Industrial loggers and PLC (Programmable Logic Controller) are now finding wide usage as their availability increases and prices fall. Also, PCs have reached a price/performance level where their use as dedicated data collection control, etc. is justified. They usually outperform and are lower than

many dedicated data loggers.

The SKL 2600 range is designed to meet requirements of PCs and PLC, giving linear, high level outputs with minimal power requirements.


The new 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 are the Lux sensor and Pyranometer. 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. Often we can produce sensors for individual requirements at little extra cost.



SKL 2610, SKL 2620, SKL 2630, SKL 2640, SKL 2650, SPECIFICATIONS

Dimensions & weight	Construction	Cable	Sensor	Detector	Filters	Sensitivity -Current	Sensitivity - Voltage	Working range	Linearity error
 200g (with 3m cable)	Anodised aluminum/ acetyl. Sealed to IP68	Screened cable 7-2-2C military specification	Cosine corrected head	Silicon, photocell	Dependant on sensor type	4-20mA	1,2,3,4, or 5 volts up to 10v full scale	See individual datasheets	<0.2%
Absolute calibration error (1)	Cosine error (2)	Azimuth error (3)	Temperature coefficient	Longterm stability (4)	Response time (5) - voltage output	Internal resistance - voltage output	Operating range	Power supply requirements	
type <3% max 5%	3%	<1%	$\pm 0.1\%/^{\circ}\text{C}$	$\pm 2\%$	50mS	See individual datasheets	-20°C to +70°C 0-100% RH	Full Scale 1,2 & 3 volts 4 volts 5 volts 10 volts 4-20mA	Voltage 5-15volts 7-15volts 9-15volts 12-15volts 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 much 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

Type	Order code	Use
Voltage output sensors		
PAR Special	SKL 2610	Monitors energy efficiency of plants and ecosystems. Output proportional to levels of quanta (photons) in the range 400-700nm
PAR Quantum	SKL 2620	
Lux	SKL 2630	Monitoring light levels in buildings, galleries, work places, animal houses, etc. Conforms to CIE photopic curve
Energy	SKL 2640	Measures energy in the visible band (400-700nm)
Solar Energy (Pyranometer)	SKL 2650	Monitors energy input to various systems, ecosystems, buildings, etc. from direct solar radiation. Gives direct solar radiation levels

For 4-20mA versions please swap "0" to "5" in the above part number, e.g. Lux SKL 2635

Accessories

SKM 221	Levelling unit
SKL 904	SpectroSense2
SKL 908	SpectroSense2+
SDL 5000	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 skyeemail@skyeinstruments.com

WEB <http://www.skyeinstruments.com>

