



UNDERWATER LIGHT SENSOR - SKUW SERIES

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).

We are proud to launch our range our new Underwater Sensors, specially designed for temporary immersion to 20m. For greater depths or for permanent immersion up to 4m, please contact Skye.

We have available a sensor with a milliamp output, suitable for use with our SpectroSense2 or DataHog2 light meters/datalogger. Or an amplified version with a Voltage output, ideal for use with third party light meters/dataloggers.

The new Underwater range of sensors is based on our popular SKR 1840 - 2 Chanel Sensor, which means we are able to offer 1 or 2 channel versions, with a choice of wavelengths between 400 and 1050 nm. Popular choices include PAR, LUX and Red/Far-Red.

Please contact Skye with further details about your application.



SKUW SPECIFICATIONS

Construction:	Housing Dupont UV resistant 'Delrin' 527UV Cosine-correcting diffuser, optical glass	Cosine error (4):	Typically <5% to 60°
Cable:	FTP 4 x 2 x 26AWG, 100 ohm, flame retardant, low smoke, zero-halogen, overall diameter 6.25mm	Azimuth error (5):	+/- <1%
Sensor:	Cosine corrected head	Longterm stability (6):	+/- 2%
Detector:	Wavelength dependent	Temperature range:	-20°C to +75°C
Filters:	Metal interference and/or glass depending on wavelengths & bandwidths chosen	Humidity range:	Sensor intended for outside use. In higher humidities, maintenance will be required to keep the surfaces clean
Output (1):	SKUW 215 & SKUW 310 - Microamp output SKUW 215/A & SKUW 310/A - Voltage output	Weight:	295g (with 3m cable and plug)
Working range (2):	Dependant on wavebands	Mounting:	M6 x 7mm topped hole in base. Sensor supplied with M6 x 16mm screw + 4x 1.5mm washers to suit panel thicknesses of 3-10mm
Linearity error:	<0.2%	Dimensions:	49mm (diameter) x 86mm (height)
Absolute calibration error (3):	typically better than 5%	IP68 to 4m permanent immersion or 20m temporary immersion. Please contact Skye for greater depths	

ORDERING INFORMATION

Sensor

- SKUW 215 - PAR Sensor (Microamp output)
- SKUW 215/A - PAR Sensor (Voltage output)
- SKUW 310 - LUX Sensor (Microamp output)
- SKUW 310/A - LUX Sensor (Voltage output)

all with 3m cable

Accessories

- SKM 222 - Levelling unit
- CAB/L - Extra cable per meter

Meters and Dataloggers

- SKL 904 - SpectroSense2, 4 channel meter
- SKL 906 - SpectroSense2+, 4 channel meter/logger
- SKL 908 - SpectroSense2+, 8 channel meter/logger
- SKL 920 - SpectroSense2+, 4 channel meter with GPS Module
- SKL 925 - SpectroSense2+, 8 channel meter/logger with GPS Module
- SDL 5000 series DataHog2 dataloggers

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 80° is typically 5% max. Figures shown are for normal use sources, e.g., sun plus sky, diffuse sun, growth chambers, etc.
- (5) Measured at 45° elevation over 360°
- (6) Maximum change in one year. Calibration check recommended at least every two years.
- (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 capacitance cable.

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