Skye Instruments Ltd have been designing and manufacturing quality, fully calibrated light sensors since 1983.

Skye offer sensors to measure light levels in the Ultraviolet A and Ultraviolet B wavebands. The wavelengths used in these sensors are according to DIN 5031 part 7. This leaflet describes the UVB sensor.

The dimensions and overall look of these sensors are similar to that of our other sensors. The housing is black aluminium and sealed to IP67 standards, making them suitable for short term underwater use.

Skye guarantees sensors to a depth of 4 meters for short term immersion. The light collecting head utilises a UV stable polymer and is cosine corrected. The sensors have been designed with an integral amplifier to give a voltage output for use with most dataloggers, computers, PLCs, etc.

Sensors calibration is traceable to NPL and each sensor is issued with a calibration certificate.

### SKU 430 SPECIFICATIONS

- **Construction:** Anodised black aluminium, sealed to IP67 Submersible to 4m Short term submersions only. Please contact us for greater depths
- **Cable:** Screened 7x1.4C military specification. Cable gland on sensor housing
- **Sensor:** Cosine corrected head. Specially formulated diffuser
- **Detector:** SiC Photodetector
- **Spectral Response (1):** 280nm - 315nm
- **Working Range (2):** 0-10 W/m²
- **Output Signal:** 0-1V
- **Sensitivity:** 150 mV / W/m²
- **Thermal Drift of Output (3):** -0.01%/°C max
- **Thermal Drift of Zero Offset (4):** Typically 0.00%/°C
- **Output Impedance:** 500 Ω
- **Power Supply:** 5-15VDC
- **Absolute calibration error (5):** typ. <3%, 5% max
- **Cosine error (6):** <3%
- **Aim drift error (7):** < 1%
- **Long-term stability (8):** < 1% per year
- **Response time:** < 10ms
- **Temperature coefficient:** < 0.5%/°C
- **Weight:** 200g (with 3m cable)
- **Temperature range:** -30 to +60°C
- **Mounting:** M6 x 7mm tapped hole in base. Sensor supplied with M6 x 16mm screw + 4x 1.5mm washers to suit panel thickness of 3-10mm
- **Dimensions:**
  - Overall: 34mm (maximum)
  - Head: 8mm
  - Cable: 6mm

### NOTES ON SPECIFICATIONS

1. **FWHM or 50% transmission**
2. **All standard Sky 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 NPL 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 chamber lighting.**
5. **Measured at 45° elevation over 360°**
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 milliseconds. They may be slightly increased if long leads are fitted, or those of a higher capacity cable.**

### ORDERING INFORMATION

- **Sensors:**
  - SKU 430: UVB sensor with 3m cable
  - SKU 430/I: UVB sensor with 3m cable and DataHog connector
  - SKU 430/SS2: UVB sensor with 2m cable and SpectroSense2 connector
- **Accessories:** (see separate datasheet)
  - SKM 222: Levelling unit
  - SKM 226: Long arm pole/wall mount
- **Meters and dataloggers:** (see separate datasheet)
  - SKL 904: SpectroSense2 4-channel display meter
  - SKL 908: SpectroSense2+ 8-channel logging meter
  - SDL 5000: DataHog2 logger range

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