## SKR110 660 / 730 Sensor ( Red / Far Red )

- # Disease and infestation studies
- # Plant Biomass studies and prediction
- # Phytochrome studies
- # Interpretation of landsat and ground truths



This is a two channel radiometer with a cosine-corrected head that is fully sealed and is suitable for permanent external mounting. It has a common light collecting area for both channels.

This sensor is most frequently ordered with filters for Red and Far Red light (660 and 730nm). This being a nominal standard around which much research work has been done.

## **SKR 110 SPECIFICATIONS**

Dimensions	Weight	Construction	Cable	Sensor	Detector	Filters	Sensitivity (Current) 660 channel	Sensitivity (Current) 730 channel	Working range (2)
Connas de la conna	160g.(with 3m cable)	Material Dupont 'Delrin' fully sealed to IP68	2 core screened DEF std 61-12/4.5	Cosine corrected head	GaAsP	Stable glass	660 channel approx. 30umol/uamp	730 channel approx. 30 umol/uamp	<500 umol/m²/ sec
Linearity error	Absolute calibration error (3)	Cosine error (4)	Azimuth error (5)	Temperature coefficient	Longterm stability (6)	Response time (7) -voltage output	Temperature range	Humidity range	
<0.2%	typ. <3% 5% max.	3%	<1%	± 0.1% / °C	±2%	10ns	-35 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.
- (2) All 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. The 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  $45^\circ$  elevation over  $360^\circ$  .
- ( 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.
- (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.



## ORDERING INFORMATION

Sensor SKR 110 Accessories SKM 221

660 / 730 ( Red / Far red ) Sensor

Leveling unit