

The [UV Warning Signal Model 511](#) is designed to provide a real-time indication of the sun's UV intensity in an easy to read package. It's great for outdoor areas such as golf courses, country clubs, school yards, outdoor sporting events, amusement parks, ski slopes, beaches, and swimming pools. This unit takes the sun's radiation, and changes the UV photons of light in the "skin sensitive range" into an electric signal that corresponds to the World Health Organization and US EPA UV Index exposure categories. Those exposure categories are represented on the UV Warning Signal by five colored indicator lights. When in operation, the UV Warning Signal illuminates the indicator light that corresponds to the level of UV radiation being received by the sensor. The heart of the unit is the Solar Light Erythema Weighted Sensor. This sensor is remote mounted for indoor installations of the UV Warning Signal and can be mounted either remotely or directly on top of the 511 chassis for outdoor installations. Hardware is provided for mounting the sensor remotely, and also included for mounting the Model 511 to a wall or pole. Walls and poles are not supplied.



Applications

- UV Index Monitoring

Features and Benefits

- Weatherproof: NEMA 4X / IP66 rated
- Flexible Configuration: Outdoor/Indoor signal, Sensor directly or remotely mounted.
- High Visibility: Super-bright LEDs are visible up to 50 meters in direct sunlight.
- Simple Operation: UV Index value is categorized into one of five color coded exposure categories.
- International Standards: UV Index values displayed in accordance with World Health Organization and US EPA guidelines.
- Stable Calibration: Extended calibration interval required every two years.

EXPOSURE CATEGORY	UV INDEX RANGE	COLOR	RECOMMENDED ACTION
Extreme	11+	Purple	Avoid being outside during mid-day hours.
Very High	8-10	Red	Seek shade. Shirt, sunscreen and hat must be worn.
High	6-7	Orange	Seek shade during mid-day hours.
Moderate	3-5	Yellow	Shirt, sunscreen, and hat should be worn.
Low	0-2	Green	No protection required.

SPECIFICATIONS

Spectral Response	280-400nm, close to Erythema Action Spectrum, Figure 1
Cosine Response	Within 5% from Ideal Cosine for Incident Angles < 70°, Figure 2
Measurement Range	0 to 16 UV Index
Operating Temperature	-30 to +55°C Ambient
Operating Environment	Indoor/Outdoor
Weight	10 lbs (4.5 kg)
Dimensions	24" H x 10" W x 5" D (60 x 25 x 13 cm)
Power Cable	30 Meters Standard Length. Three Conductor
Plug-in Transformer	110VAC 60Hz Input, 24 VAC 40 VA Output
Sensor Cable	With Hermetic Connector at Sensor End; 10 Meters Standard Length, Extension Cables Available
Sensor Mounting	Bracket Provided for Remote Mounting, Direct Mountable
Signal Mounting	Mounting Feet Provided for Wall-Mounting, Pole Mounting Assembly Available for Mounting to a 4" to 6" Pole
Ingress Points	7/8" (2.2 cm) 1/2" Trade Size (1.27 cm)

REFERENCES

The biological effects of UV-A radiation - Edited by F. Urbach and R.W. Gange, Praeger Publishers, New York, 1986
 Nichodemus F., "Self study manual on optical radiation measurements", NBS Technical Note 910-1 (1976)

Part Number: 210061

Revision Level: A

Specifications subject to change without notice.

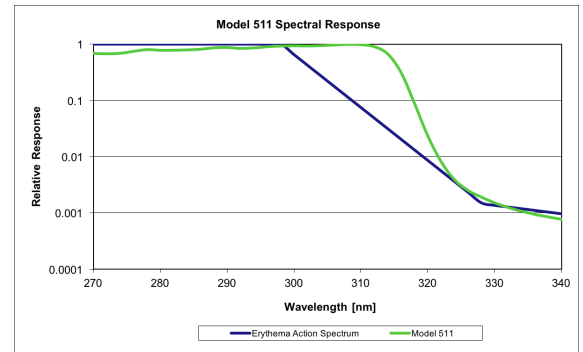


Fig. 1. Spectral Response

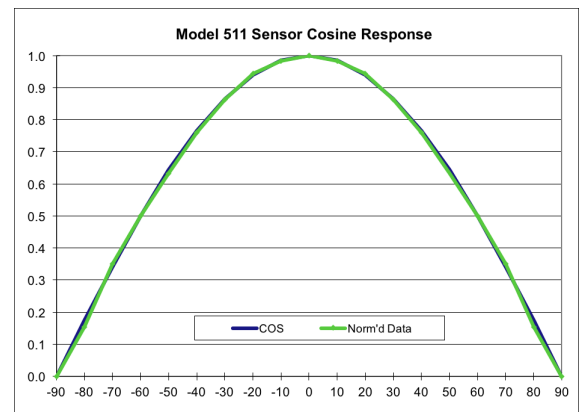


Fig. 2. Cosine Response

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Advanced NIST-Traceable Sensors for accurate measurement of UVA, UVB, UVA+B, UVC, Visible, IR, Photostability, Temperature, and Custom Wavelength – well over 130 models in both digital and analog configurations, all compatible with our Radiometers.



Ultraviolet Transmittance Analyzers available as complete integrated turnkey systems to meet the latest ISO24443 requirements.



Handheld Ozonometers and Sunphotometers for fast and dependable Column Ozone, Aerosol, and Water Vapor Thickness measurements, in addition to long-term global ultraviolet radiation studies.