LIGHT

UV Sensors for outdoor use

Skye have received many comments that their UVA and UVB sensors are more costly than some other manufacturers' UV sensors. When comparing any instrument with another, it is always very important to check that you are comparing between equal specifications.

Skye UV sensors have been carefully designed to respond only to UV wavelengths as defined by the DIN Standard 5031 part 7, i.e. UVA between 315-380 nm and UVB between 280-315 nm. All other wavelengths have been carefully filtered out to excluded them from measurement, hence these Skye sensors will record only UV even when the full solar radiation spectrum is falling on their surface.

As the Skye sensors are designed for measuring UV radiation from total solar radiation, they are fully weatherproof and waterproof, in fact submersible and guaranteed to 4m depth. They are ideal for long term installation on meteorological or environmental monitoring stations.

Some UV sensors manufactured by other companies are designed especially for measuring the output from UV lamps. These sensors are not suitable for outdoor use, as they are not waterproof and do not include the extra filter combinations to exclude solar radiation outside the UV range, which makes their manufacture much cheaper. When these sensors are used for the same purpose they were designed, i.e. measuring from UV lamps, they are never exposed to visible and infra-red wavelengths, and so the expensive extra filtering to exclude these wavelengths are not necessary. If such sensors are used under natural daylight conditions, they record UV levels incorrectly and far higher than carefully filtered sensors such as Skye's, as they are also measuring non UV wavelengths.

Skye UV sensors are designed to measure UVA or UVB wavelengths from any light source, whether natural or artificial. The wavelength response is sharply defined and each sensor is individually calibrated traceable to UK National Standards, via the National Physical Laboratory.

Due to the relatively low output of UV radiation under natural solar conditions, each Skye UV sensor has a built in amplifier to enable the UV levels to be easily measured by most meters and dataloggers. Sensor linearity is excellent, with quite negligible deviation up to its maximum outputs.