



Spectral irradiance portable solutions

Reflection and transmission measurements on materials, vegetation, water or atmosphere give valuable information about biological, physical and chemical processes. Processes driven by solar radiation, in particular bands of the spectrum through the so called action spectra, can be analysed or quantified with a sensor sensitive in the particular spectral band. The MS-720 portable spectroradiometer gives total freedom to be used in different applications and range of the spectrum between 350 - 1050 nm.

MS-720 is a handheld sensor with an integrated LCD and an internal memory. Therefore, it is suitable for outdoors stand-alone measurements. A small-sized stable grating spectrometer with photo diode array is integrated. Select a spectrometer within the spectral range to be measured.

HOW-TO Application Guide

- 1** What are the parameters to be measured. Spectral irradiance measurements give accurate information about the spectral distribution of the radiation source which can't be measured with a broadband sensor. EKO spectrometers can calculate different index parameters (Lux, PAR, W/m²)
- 2** For permanent measurement applications it is better to choose a sensor which can be permanently installed. EKO offers a wide range of spectral radiation sensors for permanent outdoor usage. For temporary measurements, or routine checks at different locations the portable solution is the best option.
- 3** The aperture needs to be selected depending on the radiation target to be measured. An aperture with a narrow field of view will cancel out diffuse or reflected radiation. A wide field of view will measure the total incidence irradiance.