INDIUM SENSOR

Elektronische Geräte für Industrie und Umwelt

Photosynthetically active radiation sensor type 5.3

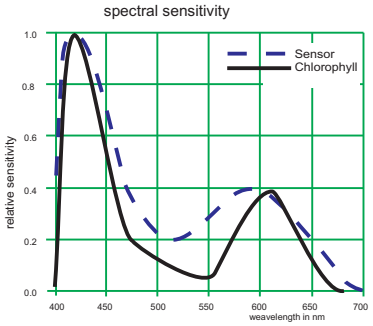
Photosynthesis activity

The ability to absorb light radiation is required for herbal life, chlorophyll has a special significance in that process.
If the intensity of light is too low, the plant will not get enough energy to grow, if the intensity is too high the plant will emit energy as fluorescence. This is an indication for the growth conditions of a plant.
If the light is too strong the plant will get dry and burned.

Photosynthesis (PAR) sensor type 5.3

Sensitivity corresponds to the absorption spectrum of chlorophyll. Measuring results are allowing immediate conclusions about the conditions for plant growth.
The PAR measuring head may be used for optimizing photochemical processes of open-land and greenhouse agriculture.
The sensor is used in agricultural research, gardening, agriculture as well as in education.
The housing is made of weatherproof anodized aluminum. Results are cosine corrected. The dome is made of plastic (PMMA).
Differencies in spectral rating:

Daylight	470-700 nm	Type 6.3	Type 5.3	glob. Rad.
Daylight	4,04 W/m²	3,38 W/m²	0,858 W/ m²	8 W/m²
Daylight	18,62µmol/sm²	15,55µmol/sm²	3,95 µmol/sm²	

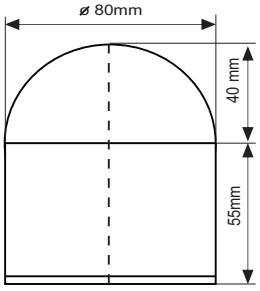


Technical specifications

Measuring range	0 - ca. 250 W/m²
spectr. sensitivity	380 nm - 700 nm
max. spectr. sensitivity	420 nm und 600 nm
working temperature	-20 - +60°C | -4 - 140°F
signal output	0V - 5V
power supply	+10V - +24V / < 750µA
turn on time	< 1 s
turn off time	< 12 s
installation	2 screws M4 in bottom
connector	downward
diffusor	PTFE
dome	PMMA
cosine correction	error f2 < +/-3%
linearity	< +/-3 %
abs.error	< +/-10 %
voltage (E=0)	< 10 mV
weight	ca. 400g | 14 oz

Specifications are subject to change without prior notice.

Dimensions:



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