

## UV Sensor economy



### Description

Simple sensor for the measurement of the sun-burning portion of the UV solar radiation.

A semiconductor photodiode captures global solar UV irradiance, the sum of both the direct and diffuse components of solar UV irradiance. An electronical transducer converts the raw signal into a voltage linearly dependent on incident UV irradiance.

A bull-eye level indicator enables easy installation and adjustment of the sensor.

### Technical Data

#### Sensor

Sensing element.....	Semiconductor photodiode
Transducer.....	Transducer with voltage output
Output signal .....	0..7 MED/h = 0..2.5 V
Spectral range.....	280..360 nm

#### Accuracy

Absolute error .....	± 5%
Cosine error .....	± 4% of reading at 0..65° incident angle
	± 9% of reading at 65..85° incident angle
Long-term drift .....	< ± 2% per year
Temperature coefficient .....	< ± 0.22% per K

#### Power Supply

Operating voltage .....	5 VDC ± 10%
Current consumption .....	3.5 mA

## Casing

Material.....	Plastic
Protection class.....	IP 65, hermetically sealed transducer
Dimensions .....	51 x 70 x 57 mm
Weight .....	0.34 kg
Mounting.....	Mounting on a plate, 3 spring-loaded mounting screws, bull-eye level indicator

## Electrical Connection

Cable.....	4 x 0.14 mm <sup>2</sup>
Cable length.....	12 m

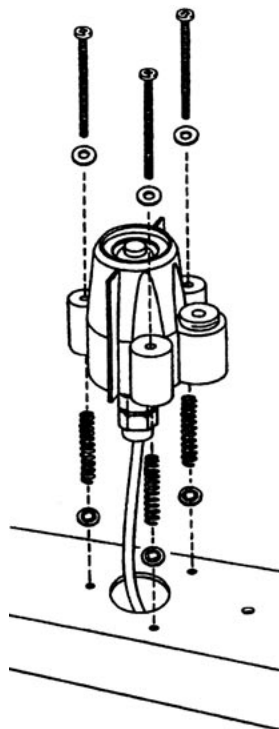
## Colours of the Wires

white.....	(+) power supply
black .....	(-) power supply (ground)
green.....	Output signal
red .....	Ground

## Environmental Conditions

Operating temperature .....	-40..+65 °C
Relative humidity .....	0..100%

## Drawing



**Wilmers  
Meßtechnik**

Hirschgraben 24  
D-22089 Hamburg • Germany  
phone: +49(0)40-75 66 08 98  
fax: +49(0)40-75 66 08 99  
eMail: [info@wilmers.com](mailto:info@wilmers.com)  
[www.wilmers.com](http://www.wilmers.com)