

## Radiometric sensors



Radiometric sensors

Our radiometric sensors accurately measure the UV irradiance or illuminance with the RM-12 or RM-22 radiometer and the UV-MAT dose control. The built-in diffusers ensure the cosine correction that is required for non-vertical irradiation.

The sensors are calibrated with traceability to PTB (Physikalisch Technische Bundesanstalt, the German national test authority); after being calibrated, they are supplied with a factory calibration certificate. Excellent long-term stability is achieved through the use of appropriate materials. Of course, a repair and spare parts service is available for many years.

The integrated electronics produce a signal voltage that is transmitted to the radiometer. Various sensors can be used with a radiometer by means of internal electronics.

The sensor on the RM-22 is identified by additional memory, which also contains the calibration and the date of manufacture. Our range includes eight spectral ranges and four measuring ranges for the sensors.

This allows the radiometric sensors to be optimally adapted for the application.

Sensors to evaluate the biological effects of irradiation are also available. Going further if necessary, in special cases, the sensors are splash-proof in accordance with IP65 and available with advanced measuring and spectral ranges.

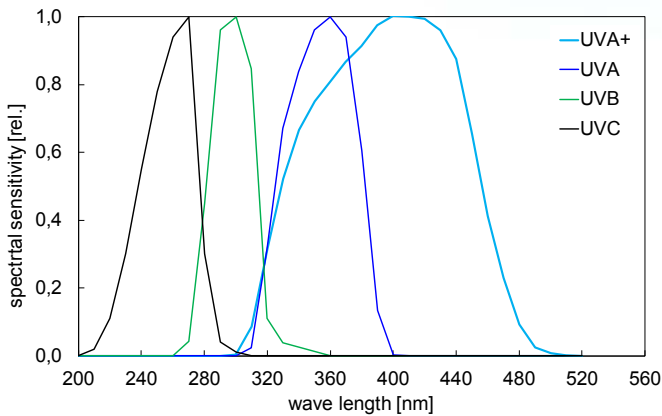
### HIGHLIGHTS

- High-precision radiometric sensors
- Eight available spectral ranges
- Proven long-term stability
- Recalibrateable sensors
- Integrated electronics
- Different measuring ranges can be selected during order
- Customized adaption for special applications
- IP65 splashproof (optional)

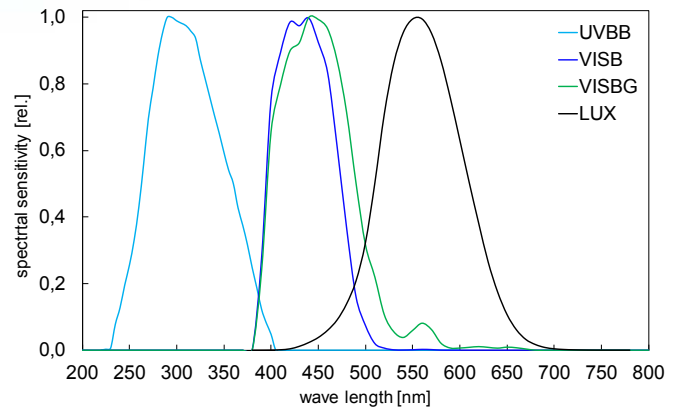
Since 1981, Opsytec Dr. Gröbel GmbH manufactures UV sensors. All sensors are calibrated in our own laboratory.



## TECHNICAL DATA



Spectral sensitivity UVA+, UVA, UVB and UVC sensors



Spectral sensitivity UVBB, VISB, VISBG and VISL sensors

## COMMON TECHNICAL DATA

Dimensions	Ø 40 mm, h 35 mm
Weight	150 g
Connecting cable	2 m
Operation temperature	0 to 40 °C
Storage temperature	-10 to 40 °C
Humidity	< 80% non-condensing

## SENSOR SPECTRAL RANGES

UVC	200 - 280 nm
UVB	280 - 315 nm
UVA	315 - 400 nm
UVA+	330 - 455 nm
UVBB (broad-band)	230 - 400 nm
VISB	400 - 480 nm
VISBG	400 - 570 nm
LUX	380 - 780 nm, V(λ)

## TECHNICAL DATA SENSORS FOR RM-12

Operation voltage	+/- 5 V
Signal voltage	0 - 2 V
Sensor connector	M12 (5 pole)
Measurement range	0 - 199 mW/cm <sup>2</sup> 0 - 1999 mW/cm <sup>2</sup> (opt. -1) 0 - 19,9 W/cm <sup>2</sup> (opt. -2) 0 - 19,9 mW/cm <sup>2</sup> (opt. -3)

## TECHNICAL DATA SENSORS FOR RM-22

Operation voltage	+/- 3,3 V
Signal voltage	0 - 2,5 V
Sensor connectors	5 pole, pluggable
Measurement range	0 - 200 mW/cm <sup>2</sup> 0 - 2000 mW/cm <sup>2</sup> (opt. -1) 0 - 20 W/cm <sup>2</sup> (opt. -2) 0 - 20 mW/cm <sup>2</sup> (opt. -3) 0 - 2 mW/cm <sup>2</sup> (opt. -4)

## PART NUMBERS

Radiometer RM-12	821200
RM-12 sensor UVC	811010
RM-12 sensor UVB	811020
RM-12 sensor UVA	811030
RM-12 sensor UVA+	811045
RM-12 sensor UVBB	811012
RM-12 sensor VISB	811040
RM-12 sensor VISBG	811042
RM-12 sensor LUX	811061

Radiometer RM-22	822201
RM-22 sensor UVC	812210
RM-22 sensor UVB	812220
RM-22 sensor UVA	812230
RM-22 sensor UVA+	812245
RM-22 sensor UVBB	812212
RM-22 sensor VISB	812240
RM-22 sensor VISBG	812250
RM-22 sensor LUX	812261