

Radiometer RM-12



The radiometer RM-12 is a precise, hand-held device for measuring irradiances and illuminances. Due to the sensor-integrated electronics, different UV and visible spectral ranges can be measured with the respective sensors. Sensors evaluating biological effects of irradiation are also available.

The integrated diffuser serves to provide the cosine correction that is necessary with non-perpendicular irradiation. The sensors are calibrated with traceability to the PTB; after being calibrated, they are supplied with a factory calibration certificate. Repair and spare parts service is, of course, available for many years.

The sensors can be supplied with different measuring ranges.

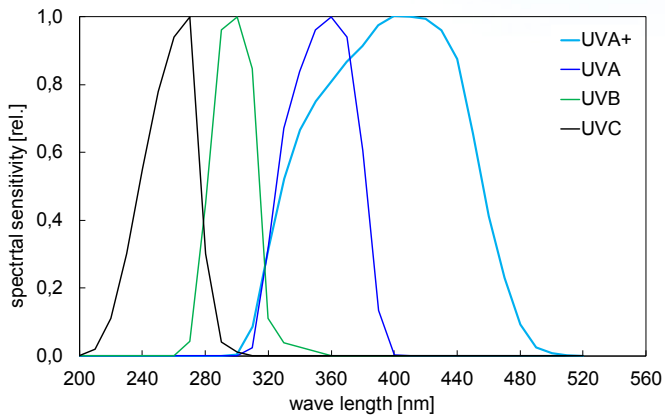
Application:

- Measurement of UV lamps, UV LEDs, light sources
- Controll of UV irradiation
- Measurement of job security due to artificial optical radiation
- Photometric measurements

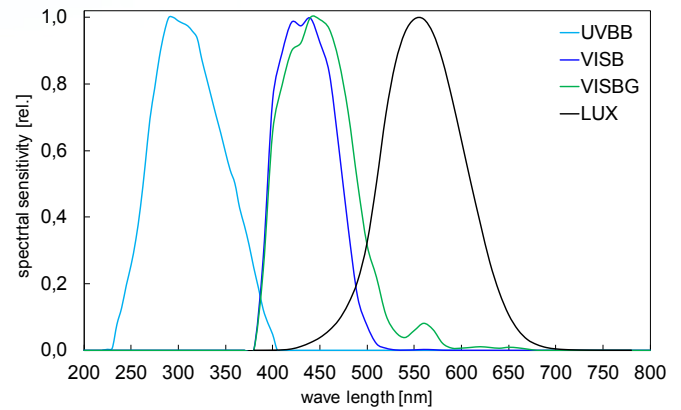
TECHNICAL DATA

Measurement range	0 - 199 mW/cm ²
	0 - 1999 mW/cm ² (opt.)
	0 - 19.9 W/cm ² (opt.)
Resolution	0 - 19.9 mW/cm ² (opt.)
	0,01 mW/cm ²
	0,1 mW/cm ² (opt.)
	0,001 W/cm ² (opt.)
Illumination meas. range.	0,001 mW/cm ² (opt.)
	0 - 200.000 lx
	10 lx
Resolution	10 lx
Dimensions	160 x 85 x 35 mm
Weight	300 g
Battery	9 V
Battery lifetime	~ 50 h
Operation temperature	0 to 40 °C
Storage temperature	-10 to 40 °C
Humidity	< 80% non-condensing
Sensor connector	M12 (5 pole)

TECHNICAL DATA



Spectral sensitivity UVA+, UVA, UVB and UVC sensors



Spectral sensitivity UVBB, VISB, VISBG and LUX sensors

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, $V(\lambda)$

TECHNICAL DATA SENSORS

Operation voltage	+/- 5V
Signal voltage	0 - 2 V
Dimensions	Ø 40, 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

PART NUMBERS

Radiometer RM-12	821200
RM sensor UVC	811010
RM sensor UVB	811020
RM sensor UVA	811030
RM sensor UVA+	811045
RM sensor UVBB	811012
RM sensor VISB	811040
RM sensor VISBG	811042
RM sensor LUX	811090
Transport case	921000
UV safety goggles	918800

SCOPE OF DELIVERY

RM-12 (radiometer without sensor), manual, battery. Please select desired sensor and measurement range during order. If no measurement range is specified we'll deliver standard range (0 - 199 mW/cm²).

Since 1981, Opsytec Dr. Gröbel GmbH manufactures UV sensors. All products can be customized and calibrated to specific requirements - even in low quantities.



Example: UVC sensors with reduced height of only 7 mm