

Optical radiation

Radiation probe FLA 623 x



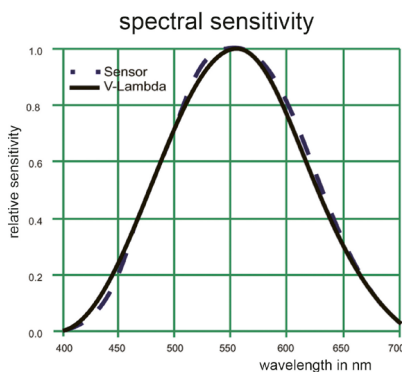
- Probes for various spectral ranges:
- Illuminance (V_{λ}), UVA, UVB, UVC, global radiation, IR, quantum (photosynthesis)
- Sturdy aluminum housing
- ALMEMO® connecting cable, plug-in
- For indoor applications

Common technical data

Diffuser	PTFE
Cosine correction	Error f2 <3 %
Linearity	<1 %
Absolute error	<10 % (<5 % for FLA623VL)
V lambda adapter	<3 % (for FLA623VL only)
Nominal temperature	22 °C ±2 K
Operating temperature	-20 to +60 °C
Signal output	0 to +2 V
Duty cycle	<1 second
Power supply	via ALMEMO® connector (5 to 15 VDC)

Electrical connection	Mountable male connector, lateral
Connecting cable	PVC cable, plug-in, with ALMEMO® connector
Housing	Aluminum, black anodized
Fixture	2 screws M2 in base plate
Dimensions	Diameter 33 mm, height approx. 29 mm
Weight	approx. 50 g (without cable)

Probe for measuring illuminance FLA 623 VL



- This measures the V_{λ} radiation (visible light, equivalent to sensitivity of the human eye).
- For evaluating lighting conditions, e.g. in the workplace
- The sensor complies with device class B as per DIN 5032.

Technical data:

Measuring range V_{λ}	0.05 to approx. 170 klx
Measuring channels	1st channel up to approx. 20,000 lx 2nd channel up to approx. 170.00 klx
Spectral sensitivity	380 to 720 nm, max. at 555 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

Illuminance probe with ALMEMO® connecting cable, length = 2 meters

Options

ALMEMO® connecting cable, length = 5 meters

ALMEMO® connecting cable, length = 10 meters

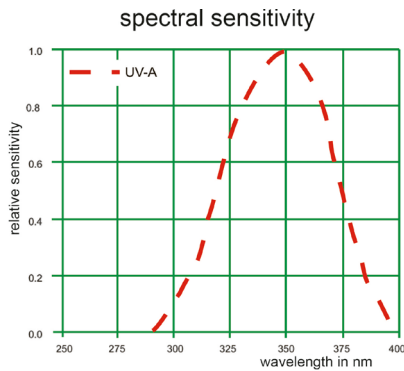
Order no.

FLA623VL

OA9623L05

OA9623L10

Probe for UVA radiation FLA 623 UVA



- This measures long-wave UV radiation (bronzing effect on human skin).
- Its spectral sensitivity is weighted towards global solar radiation.

Technical data:

Measuring range	0.03 to approx. 100 W/m ²
Spectral sensitivity	310 to 400 nm, maximum at 355 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

UVA probe with ALMEMO® connecting cable, length = 2 meters

Options:

- ALMEMO® connecting cable, length = 5 meters
- ALMEMO® connecting cable, length = 10 meters

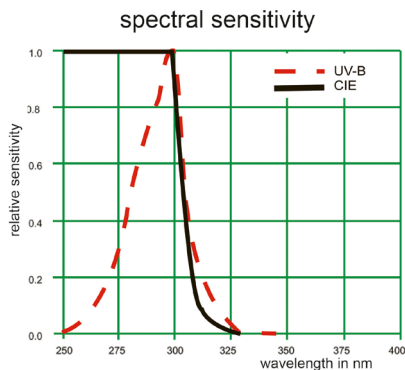
Order no.

FLA623UVA

OA9623L05

OA9623L10

Probe for UVB radiation FLA 623 UVB



- This measures short-wave UVB radiation.
- Its spectral sensitivity is weighted towards global solar radiation likely to cause erythema (sunburn) as per CIE recommendation (Commission Internationale de l'Éclairage). The UV index can be calculated.

Technical data:

Measuring range	0.002 to approx. 5 W/m ²
Spectral sensitivity	265 to 315 nm, maximum at 297 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

UVB probe with ALMEMO® connecting cable, length = 2 meters

Options

- ALMEMO® connecting cable, length = 5 meters
- ALMEMO® connecting cable, length = 10 meters

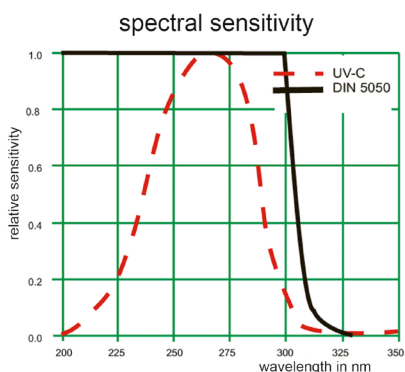
Order no.

FLA623UVB

OA9623L05

OA9623L10

Probe for UVC radiation FLA 623 UVC



- This measures UVC radiation, e.g. Hg line at 256 nm.
- This probe can be used inter alia in water disinfection units.

Technical data:

Measuring range	1 to approx. 1990 mW/m ²
Spectral sensitivity	220 to 280 nm, maximum at 265 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

UVC probe with ALMEMO® connecting cable, length = 2 meters

Options:

- ALMEMO® connecting cable, length = 5 meters
- ALMEMO® connecting cable, length = 10 meters

Order no.

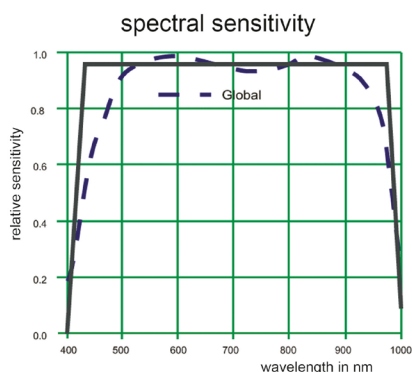
FLA623UVC

OA9623L05

OA9623L10

Optical radiation

Probe for global radiation FLA 623 GS



- This measures the solar spectrum in the visible range and in the short-wave IR range.
- Global radiation comprises both direct and diffused solar radiation.

Technical data:

Measuring range	0.4 to approx. 1300 W/m ²
Spectral sensitivity	400 to 1100 nm, maximum at 780 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

Global radiation probe with ALMEMO® connecting cable, length = 2 meters

Options:

ALMEMO® connecting cable, length = 5 meters

ALMEMO® connecting cable, length = 10 meters

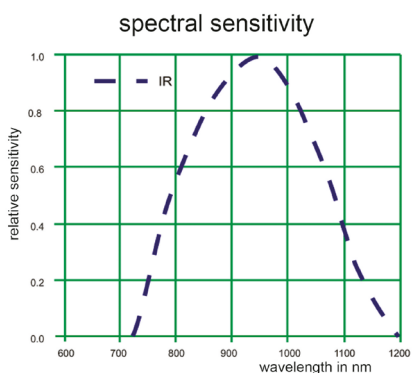
Order no.

FLA623GS

OA9623L05

OA9623L10

Probe for infra-red radiation FLA 623 IR



- This measures the solar spectrum in the short-wave IR range (excluding the visible range).

Technical data:

Measuring range	0.1 to approx. 400 W/m ²
Spectral sensitivity	800 to 1100 nm, maximum at 950 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

IR probe with ALMEMO® connecting cable, length = 2 meters

Options:

ALMEMO® connecting cable, length = 5 meters

ALMEMO® connecting cable, length = 10 meters

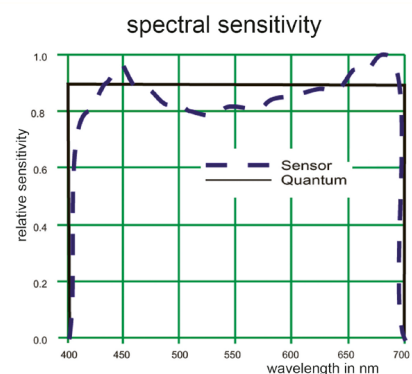
Order no.

FLA623IR

OA9623L05

OA9623L10

Probe for quantum radiation FLA 623 PS



- This measures the visible light absorbed by the chlorophyll in plants during photosynthesis.
- It determines the level of quantum radiation in the spectral range specified.
- It is used to assess the conditions in which plants develop in open field and greenhouse cultivation.

Technical data:

Measuring range	1 to approx. 3000 μmol/m ² s
Spectral sensitivity	380 to 720 nm, maximum at 420 and 700 nm

Common technical data and image see page 14.05

Variants (including factory test certificate)

Quantum probe with ALMEMO® connecting cable, length = 2 meters

Options:

ALMEMO® connecting cable, length = 5 meters

ALMEMO® connecting cable, length = 10 meters

Order no.

FLA623PS

OA9623L05

OA9623L10