Global Radiation Probe Head FLA 613 GS



- Measuring head in anodized aluminium housing with a plastic dome that is transparent to UV light.
- Rain and splash-proof system, additionally with desiccant to prevent dome from inside condensation.
- Particularly suitable for outdoor measurements, e.g. in medical and biological research, weather information and forecast systems, climatology, agriculture and for general public information.

Technical Data

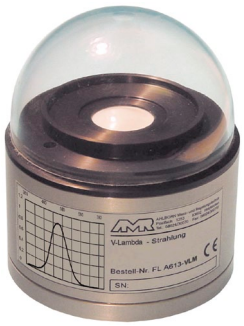
Measuring range:	0 to approx. 1200W/m²
Spectral sensitivity:	400nm to 1100nm
Maximum spectral sensitivity:	780nm
Signal output:	0V to 2V
Power supply:	+5V to +15V
Mounting:	2 screws M4, in base plate
Cable passage:	downwards
Housing:	anodized aluminium
Diffusor:	PTFE
Dome:	PMMA

Cos correction:	error f2 < 3%
Linearity:	< 1%
Absolute error:	< 10%
Residual voltage: (E = 0)	< 10mV
Nominal temperature:	22°C ±2°C
Operating temperature:	–20°C to +60°C
Dimensions:	housing: 55 mm high dome 40 mm high diameter: 80 mm
Weight:	approx. 300 g

Option	Order no.
Longer cable Total length = 5 meters	OA9613K05

Type (including test protocol)	Order no.
Weather-proof measuring head for measuring the global radiation, incl. ALMEMO® connector with 1.5m cable	**FLA613GS**
Factory calibration KL90xx radiation for sensor (see chapter Calibration certificates)	

Illuminance measuring head FLA 613 VLM



- Measuring head in anodized aluminum housing, with UV-transparent plastic dome.
- Rain-proof, splash-protected system, with desiccant to prevent condensation forming on the inside of the dome.
- Especially suitable for measuring operations outdoors, e.g. in medical, biological, and climate research, in weather information forecast systems, in agriculture, and for the purposes of general information for the public.
- The spectral sensitivity of the receiver corresponds approximately to that of the human eye.

Technical Data

Measuring range :	0 to 170 klux (approx. 250 W/m²)
Spectral sensitivity :	360 to 760 nm
Max. spectral sensitivity :	550 nm
Signal output	0 to 2 V
Power supply :	+5 to +15 V
Mounting :	2 screws, M4, in base plate
Cable passage :	downwards
Housing :	anodized aluminum
Diffusor :	PTFE
Dome :	PMMA

Cos correction :	error f2 <3%
Linearity :	<1%
Absolute error :	< 10 %
Residual voltage (E = 0) :	<10 mV
Nominal temperature :	22 ± 2 °C
Operating temperature :	-20 to +60 °C
Dimensions :	Housing : 55 mm high Dome : 40 mm high Diameter : 80 mm
Weight :	approx. 300 g

Type (including test protocol)	Order no.
Weather-resistant measuring head for measuring the illuminance including cable, 1.5 m, and ALMEMO® connector	**FLA613VLM**
Factory calibration KL90xx radiation for sensor (see chapter Calibration certificates)	

10/2013 • We reserve the right to make technical changes.

UVA Radiation Probe Head FLA 613 UVA



- Measuring head in anodized aluminium housing with a plastic dome that is transparent to UV light.
- Rain and splash-proof system, additionally with desiccant to prevent dome from inside condensation.
- Particularly suitable for outdoor measurements, e.g. in medical and biological research, weather information and forecast systems, climatology, agriculture and for general public information.

Technical Data

Measuring range:	0 to approx. 3mW/cm²
Spectral sensitivity:	310 to 400nm
Maximum spectral sensitivity:	335nm
Signal output:	0V to 2V
Power supply:	+5V to +15V
Mounting:	2 screws M4, in base plate
Cable passage:	downwards
Housing:	anodized aluminium
Diffusor:	PTFE
Dome:	PMMA (transparent to UV)

Cos correction:	error f2 < 3%
Linearity:	< 1%
Absolute error:	< 10%
Residual voltage: (E = 0)	< 10mV
Nominal temperature:	22°C ±2°C
Operating temperature:	–20°C to +60°C
Dimensions:	housing: 55 mm high dome 40 mm high diameter: 80 mm
Weight:	approx. 300 g

Type (including test protocol)	**Order no.**
Weather-proof measuring head for measuring the UVA radiation including cable, 1.5 m, and ALMEMO® connector	**FLA613UVA**
Factory calibration KL90xx radiation for sensor (see chapter Calibration certificates)	

UVB RadiationProbe Head FLA 613 UVB



- Measuring head in anodized aluminium housing with a plastic dome that is transparent to UV light.
- Rain and splash-proof system, additionally with desiccant to prevent dome from inside condensation.
- Particularly suitable for outdoor measurements, e.g. in medical and biological research, weather information and forecast systems, climatology, agriculture and for general public information.

Technical Data

Measuring range:	0 to approx. 50mW/cm²
Spectral sensitivity:	265 to 315nm
Maximum spectral sensitivity:	297nm
Signal output:	0V to 2V
Power supply:	+5V to +15V
Mounting:	2 screws M4, in base plate
Cable passage:	downwards
Housing:	anodized aluminium
Diffusor:	PTFE
Dome:	PMMA (transparent to UV)

Cos correction:	error f2 < 3%
Linearity:	< 1%
Absolute error:	< 10%
Residual voltage: (E = 0)	< 10mV
Nominal temperature:	22°C ±2°C
Operating temperature:	–20°C to +60°C
Dimensions:	housing: 55 mm high dome 40 mm high diameter: 80 mm
Weight:	approx. 300 g

Type (including test protocol)	**Order no.**
Weather-proof measuring head for measuring the UVB radiation including cable, 1.5 m, and ALMEMO® connector	**FLA613UVB**
Factory calibration KL90xx radiation for sensor (see chapter Calibration certificates)	

Star Pyranometer FLA 628 S



- Star pyranometer, according to Dirmhirn, for measuring the global radiation, the sky radiation and the short-wave radiation.
- Independent from ambient temperature through differential temperature measurement.
- Cut precision glass cupola for shielding from external environmental effects.
- Levelling by 3 setting screws and an integrated bubble

Technical Data

Measuring range:	0 to 1500W/m^2
Resolution:	0.1W/m^2
Spectral range:	0.3 to 3µm
Output:	approx. 15mV/Wm^{-2}
Impedance:	approx. 35ohms
Operative range:	–40 to +60°C
Accuracy:	cosine effect + azimuth effect + temperature influence
Cosine effect:	<3% of measured value (0 to 80° inclination)
Inclination azimuth effect:	< 3% of meas. val.
Temperature influence:	< 1% of meas. val. (–20 to +40°C)

Nominal temperature:	22°C ±2°C
Linearity:	<0.5% (0.5 to 1330W/m^2)
Stability:	<1% of the meas. range per year
Settling time:	25s (t_{95})
Dimensions:	160mm Ø, 75mm high, hole circle: 134mm Ø, holes: 8mm Ø
Weight:	1 kg

Accessories	Order no.
Shadow belt with stand	ZB9628SB

Type (including test protocol)	Order no.
Star pyranometer including 3m cable with ALMEMO® connector and programmed calibration value	**FLA628S**
Factory calibration KL90xx radiation for sensor (see chapter Calibration certificates)	

Other variants are available on request



Probe for measuring global radiation FLA 613 T1B11, 3-mode sensor : It measures UVA, VIS, IRA radiation.

Spectral sensitivity from 315 to 1100 nm



Probe for measuring global radiation FLA 613 GS-SDEK, This measures the global, direct, and diffused solar radiation (integrated shadow bar).

Spectral sensitivity from 380 to 1100 nm

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