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/m^2	Cos correction:	error $f2 < 3\%$	
Spectral sensitivity:	400nm to 1100nm	Linearity:	< 1%	
Maximum spectral sensitivity: 780nm		Absolute error:	< 10%	
Signal output:	0V to 2V	Residual voltage: $(E = 0)$	< 10mV	
Power supply:	+5V to +15V	Nominal temperature:	$22^{\circ}C \pm 2^{\circ}C$	
Mounting:	2 screws M4, in base plate	Operating temperature:	-20°C to +60°C	
Cable passage:	downwards	Dimensions:	housing: 55 mm high	1
Housing:	anodized aluminium		dome 40 mm high	
Diffusor:	PTFE	XX7 1 1	diameter: 80 mm	
Dome:	РММА	Weight:	approx. 300 g	
Option				Order no.
Longer cable Total length = 5 meters				OA9613K05
TVDE (including tes	st 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/m ²)	Cos correction :	error f2 <3%
Spectral sensitivity :	360 to 760 nm	Linearity :	<1%
Max. spectral sensitivity :	550 nm	Absolute error :	< 10 %
Signal output	0 to 2 V	Residual voltage $(E = 0)$:	<10 mV
Power supply :	+5 to +15 V	Nominal temperature :	$22 \pm 2 \ ^{\circ}C$
Mounting :	2 screws, M4, in base plate	Operating temperature :	-20 to +60 °C
Cable passage :	downwards	Dimensions :	Housing : 55 mm high
Housing :	anodized aluminum		Dome : 40 mm high
Diffusor :	PTFE		Diameter : 80 mm
Dome :	РММА	Weight :	approx. 300 g

Type (including test protocol)

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

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.

 $\frac{\text{error } f2 < 3\%}{< 1\%}$

< 10%

< 10 mV

 $22^{\circ}C \pm 2^{\circ}C$

 -20° C to $+60^{\circ}$ C

housing: 55 mm high dome 40 mm high diameter: 80 mm approx. 300 g

Technical Data

Measuring range:	0 to approx. 3mW/cm^2	Cos correction:
Spectral sensitivity:	310 to 400nm	Linearity:
Maximum spectral sens	itivity: 335nm	Absolute error:
Signal output:	0V to 2V	Residual voltage: $(E = 0)$
Power supply:	+5V to +15V	Nominal temperature:
Mounting:	2 screws M4, in base plate	Operating temperature:
Cable passage:	downwards	Dimensions:
Housing:	anodized aluminium	
Diffusor:	PTFE	
Dome:	PMMA (transparent to UV)	Weight:

Type (including test protocol)

Weather-proof measuring head for measuring the UVA radiation including cable, 1.5 m, and ALMEMO $^{\circledast}$ connector

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/cm ²	Cos correction:	error f $2 < 3\%$
Spectral sensitivity:	265 to 315nm	Linearity:	< 1%
Maximum spectral sensiti	vity: 297nm	Absolute error:	< 10%
Signal output:	0V to 2V	Residual voltage: $(E = 0)$	< 10mV
Power supply:	+5V to +15V	Nominal temperature:	$22^{\circ}C \pm 2^{\circ}C$
Mounting:	2 screws M4, in base plate	Operating temperature:	-20° C to $+60^{\circ}$ C
Cable passage:	downwards	Dimensions:	housing: 55 mm high
Housing:	anodized aluminium		dome 40 mm high
Diffusor:	PTFE		diameter: 80 mm
Dome:	PMMA (transparent to UV)	Weight:	approx. 300 g

Type (including test protocol)

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

FLA613UVB

Order no.

Meteorology

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	Nominal temperature:	$22^{\circ}C \pm 2^{\circ}C$
Resolution:	0.1W/m ²	Linearity:	<0.5% (0.5 to 1330W/m ²)
Spectral range:	0.3 to 3µm	Stability:	<1% of the meas. range per year
Output:	approx. 15mV/Wm ⁻²	Settling time:	25s (t ₉₅)
Impedance:	approx. 35ohms	Dimensions:	160mm Ø, 75mm high,
Operative range:	-40 to +60°C		hole circle: 134mm Ø,
Accuracy:	cosine effect + azimuth effect + tempera- ture influence		holes: 8mm Ø
		Weight:	1 kg
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)		

Accessories	Order no.
Shadow belt with stand	ZB9628SB

Type (including test protocol)

Star pyranometer including 3m cable with ALMEMO® connector and programmed calibration valueFLA628SFactory calibration KL90xx radiation for sensor (see chapter Calibration certificates)FLA628S

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

Order no.