

CGR 3



CGR 3 is the partner to the CMP 3 and CMP 6 pyranometers. The flat silicon window transmits infrared radiation and an internal thin film coating blocks short-wave solar radiation from reaching the broadband thermopile detector. The field of view is 150 °. The small size and sealed construction make this instrument the ideal choice for horticulture and agriculture. A screw-in mounting rod is available for easy installation.

The waterproof connector has gold-plated contacts and is fitted with 10 m of high quality signal cable as standard. A 10 K thermistor internal temperature sensor is fitted; a Pt-100 sensor is optional. There is an integrated bubble level and a white sun shield prevents the body heating up.

Two CGR 3's can easily be mounted back-to-back and fitted with the accessory screw-in mounting rod to make a low cost net pyrgeometer.

Specifications

Response time (95 %)	< 18 s
Non-stability (change/year)	< 1 %
Non-linearity (-250 to 250 W/m²)	< 1 %
Window heating offset (with 1000 W/m² direct solar radiation)	< 15 W/m²
Temperature dependence of sensitivity	< 5 % (-10 °C to +40 °C)
Sensitivity	5 to 10 µV/W/m²
Operating temperature	-40 °C to +80 °C
Field of view	150 °
Spectral range (50 % points)	4.5 to 42 µm
Irradiance (net)	-250 to 250 W/m²
Temperature sensor	10 K Thermistor (optional Pt-100)

Article	Part number
CGR 3 Pyrgeometer • 10 K • 10 m cable	0359920-012
Options for CGR 3	
CGR 3 Pyrgeometer • 10 K • 25 m cable	0359920-014
CGR 3 Pyrgeometer • 10 K • 50 m cable	0359920-015
CGR 3 Pyrgeometer • 10 K • plug only, no cable	0359920-018
CGR 3 Pyrgeometer • Pt-100 • 10 m cable	0359920-022
CGR 3 Pyrgeometer • Pt-100 • 25 m cable	0359920-024
CGR 3 Pyrgeometer • Pt-100 • 50 m cable	0359920-025
CGR 3 Pyrgeometer • Pt-100 • plug only, no cable	0359920-028
CGR 3 Pyrgeometer • Ampbox • 10 K • 10 m cable	0359920-812
CGR 3 Pyrgeometer • Ampbox • 10 K • 25 m cable	0359920-814
CGR 3 Pyrgeometer • Ampbox • 10 K • 50 m cable	0359920-815
CGR 3 Pyrgeometer • Ampbox • 10 K • plug only, no cable	0359920-818
CGR 3 Pyrgeometer • Ampbox • Pt-100 • 10 m cable	0359920-822
CGR 3 Pyrgeometer • Ampbox • Pt-100 • 25 m cable	0359920-824
CGR 3 Pyrgeometer • Ampbox • Pt-100 • 50 m cable	0359920-825
CGR 3 Pyrgeometer • Ampbox • Pt-100 • plug only, no cable	0359920-828
CGR 3 Pyrgeometer • Pt-100 • plug only, no cable	0359920-028
100 m cable	On request
<i>Note: AMPBOX is adjusted with offset zero for negative values; 4 mA = -300 W/m², 16 mA = 0 W/m², 20 mA = +100 W/m²</i>	

Accessories for CGR 3	Part number
Outdoor Calibration under clear skies For increased accuracy, instead of standard laboratory calibration	0999915-1
Mounting Rod Screw-in 300 mm long x 12 mm Ø	0338720
CMB 1 Mounting Bracket In combination with mounting rod for easy attachment to a pole or a wall	0369701
CM 121B Shadow Ring for unventilated radiometers Manually adjusted device provides diffuse sky irradiance measurement Correction factors for latitude of location supplied	0346900
<i>Note: CGR 3 cannot be used with the CVF 3 ventilation unit</i>	