MS-21 Pyrgeometer



A New Standard in Longwave Radiation Measurement









Overview

Designed to raise the bar, the MS-21 Pyrgeometer is research-grade, accurate, robust and delivers superior stability independent of the sensors' operating temperature. Based on a new design concept and built for consistency, the MS-21 minimises temperature differences and suppresses window heating errors.

Whatever the conditions, the MS-21 measures longwave downwelling radiation and longwave net radiation in a wide spectral band without needing a sun tracker with a shading device or shadow ring. It features a silicon meniscus dome with solar blind interference filter and hard carbon coating, a new thermal coupling design, onboard temperature compensating electronics, and a unique aluminium alloy sun shield.

With a 5-year Warranty, World Infrared Standard Group (WISG) traceable calibration, and PT-100/4W IEC60751 Class A Industrial platinum resistance thermometers and temperature sensors; the MS-21 achieves the highest standards for quality, accuracy, and reliability.

Features



NEW thermal coupling design, outstanding low thermal resistance



Low temperature dependency, excellent stability



Designed & built for ultra-low window heating



5-year warranty & EKO quality guarantee

Measurement wavelength	4.5 to 42µm
Sensitivity	10 to 20uV/W/m²
Response time	< 18 sec (@95%)
Window heating offset	< 4 W/m²
Zero offset B	< 1 W/m²
Temperature response	< 1 % (-20 to + 50°)
Non linearity	< 1 %
Operating temperature range	-40 to +80°
Net radiation measurement range	- 250 to 250 W/m²
Field of view	180 degrees
Detector temperature sensor	Pt-100, 4 wires
Temperature tolerance value	± (0.15 + 0.002 *t) °C
Impedance (approx.)	100 to 200Ω
Heater/Ventilation Unit (optional)	Compatible with MV-0

Application



The MS-21 measures longwave downwelling radiation and longwave net radiation in a wide spectral band, whatever the measurement conditions, and is designed for climate research applications, meteorology and scientific studies.

QR

Use the QR code to visit our website, contact our team, or to find out more about the MS-21 and our full range of industry-leading, high-quality, scientific and meteorological measurements.



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Made in Japan for over 90 years, EKO solar energy sensors and environmental instruments are built on a legacy of innovation, an uncompromising commitment to quality, and industry-leading accuracy.

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Spectro-Radiometers

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