

# MS-21 Pyrgeometer

A New Standard in Longwave Radiation Measurement



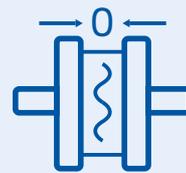
## Overview

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

## Specifications

Measurement wavelength	4.5 to 42 $\mu$ m
Sensitivity	10 to 20 $\mu$ V/W/m <sup>2</sup>
Response time	< 18 sec (@95%)
Window heating offset	< 4 W/m <sup>2</sup>
Zero offset B	< 1 W/m <sup>2</sup>
Temperature response	< 1 % (-20 to + 50°)
Non linearity	< 1 %
Operating temperature range	-40 to +80°
Net radiation measurement range	- 250 to 250 W/m <sup>2</sup>
Field of view	180 degrees
Detector temperature sensor	Pt-100, 4 wires
Temperature tolerance value	$\pm$ (0.15 + 0.002 *t) °C
Impedance (approx.)	100 to 200 $\Omega$
Heater/Ventilation Unit (optional)	Compatible with MV-01

## 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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### EKO Instruments Co. Ltd

info@eko.co.jp  
+81-3-3469-6713

### EKO Instruments Sales India

info@eko.co.jp  
+91 9869047721

### EKO Instruments Europe B.V.

info@eko-eu.com  
+31-0-703050117

### EKO Instruments Sales China

info@eko-chn.com  
+81-3-3469-6713

### EKO Instruments USA Inc.

info@eko-usa.com  
+1-408-977-7751

eko-instruments.com