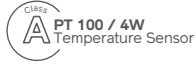


# MS-21 Pyrgeometer

A New Standard in Longwave Radiation Measurement



## Performance & Calibration 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.

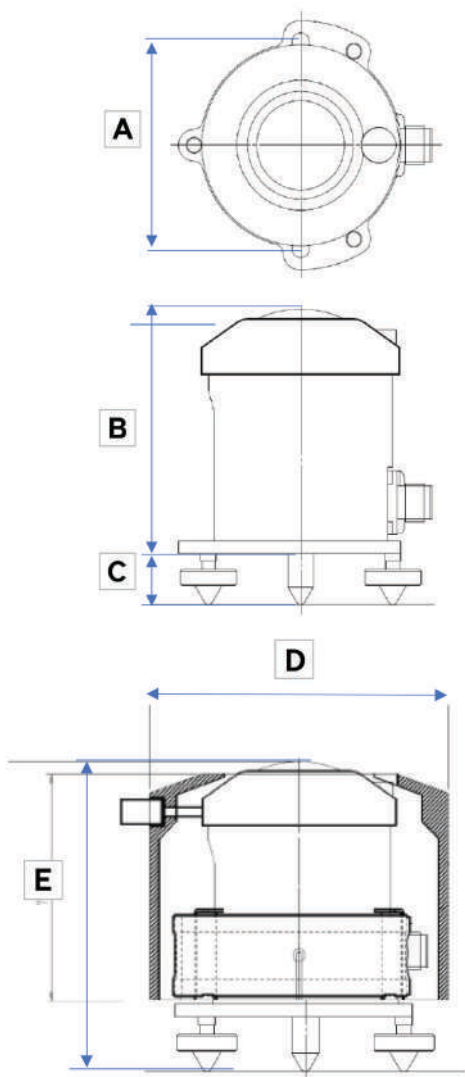
Made in Japan, each unit comes with a 5-year warranty and is assessed and adjusted by EKO engineers for first-rate temperature stability without any additional data manipulation or correction. PMOD/WSC calibration, coupled with calibration traceability to the World Infrared Standard Group (WISG), also help ensure that the MS-21 Pyrgeometer meets the highest quality, accuracy, and reliability standards.



## 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

## Technical Diagram



## Dimensions

Items	MS-21
A. Fixing Hole Pitch	65mm
B. Body Height	76.6mm
C. Leveling Screw Height	16mm
D. Width (including Sun Screen)	φ97mm
E. Overall Height (approx.)	92.6mm

## Technical Features

Bubble level accuracy	0.1°
Output Cable (Outer diameter)	AWG24: 0.25mm <sup>2</sup> x 6 pins (φ6.7mm)
Output Cable Terminal	Pin-Terminal (9.3-9.5)
Weight	0.7kg

## 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.



## Explore EKO

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.

With a range of products and services to suit every project or application requirement, Explore EKO now, or get in touch to find out how EKO Instruments can help you.



Albedometers



Pyranometers



Pyrheliometers



Spectro-Radiometers

### 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