

Pyrheliometer

EKO Pyrheometer MS-54 measure the direct solar irradiance. For the measurement, MS-54 shall be mounted on Sun Tracker in order to track the sunshine at all times. The direct solar irradiance is output as continuous electric signals. Thermopile is used as detector, and MS-54 structure is in conformity with WMO standards. MS-54 is ISO First class (ISO9060) Pyrheometer.



Pyrheometer with Sun Tracker STR-21. STR-21 is not included in MS-54.



Pyrheometer MS-54



Sun Tracker STR-21 (Option)

Specifications, in conformity with ISO standards

Response time	7secs (95% response), 10secs (99% response)
Zero offset	+/-3W/m ² (When atmospheric temperature is changed 5deg.C in 1 hour)
Non-stability	< +/-1% per year
Non-linearity	+/-0.2% (<1000W/m ²)
Spectral sensitivity	+/-0.5% (0.35 to 1.5μm)
Temperature response	+/-1% (-20 ~ +50 deg.C), +/-1.5% (-40 ~ +70 deg.C)
Tilt response	Not applicable
Traceability	WRR traceable

Specifications, not in conformity with ISO standards

Sensitivity	5+/-0.25uV/(W/m ²)
Spectral sensitivity	0.2 ~ 4um (50% point)
Impedance	50 ~ 200 Ω
Irradiance	0 ~ 4000W/m ²
measurement range	-30 ~ +60 deg.C
Aperture angle (FOV)	5 +/- 0.2 degrees (WMO standards)
Tilt angle	1 +/- 0.2 degrees (WMO standards)
Pointing accuracy	+/-0.2 degrees against optical axis
Materials	Anodized aluminum (body tube), Stainless (screws)
Weight	Approximately 700g
Desiccant	Silica gel
Cable length	10m
Black painting	Carbon black
Options	Temperature sensor Pt100(4 cables, DIN standard) or Thermistor (YSI44031) can be selected by the customer.