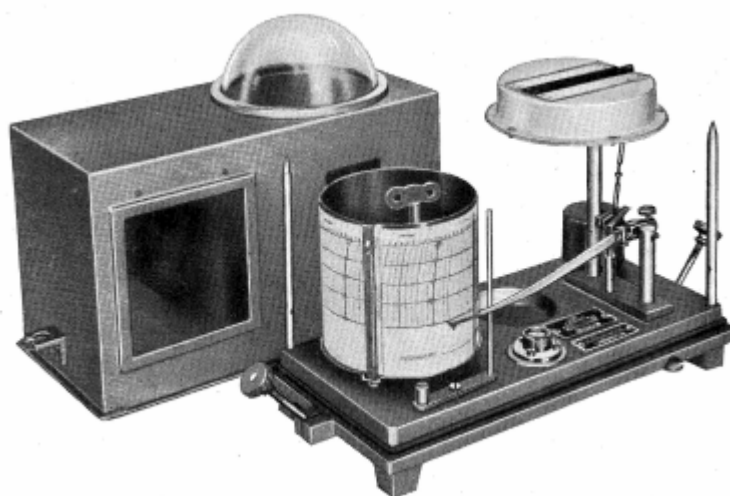


ROBITZSCH TYPE RADIATION RECORDER - ACTINOGRAPH No. 58c

General

The Robitzsch Type Radiation Recorder measures the total of direct solar and diffuse celestial radiation reduced to a horizontal plane. The measuring accuracy of about $\pm 5\%$ is sufficient for all fields of application. Attendance of the recorder is easy for untrained persons, too.



Radiation Recorder 58 c

The measuring system consists of three symmetrically arranged bimetallic strips, a black one in the middle between two whitened strips. Due to differential absorption a temperature difference is created between the strips which serves as a measure of radiation intensity. The position of the recording pen depends only on the temperature difference of the strips and is not influenced by the actual temperature level.

The sensitivity range comprises the entire spectrum of solar and celestial radiation; only the longwave range $> 2 \mu$ is not included, this, however, contributes only very little to the total energy. The total radiation during measuring time in cal^{-2} is obtained by integrating the radiation curve. The radiation recorder in its present form has been considerably improved as compared with former models. These improvements are:

- a) Greater measuring accuracy and independence of disturbing effects by the elimination of scattered radiation (Protective cap after Götz and Casparis).
- b) Direct recording of radiation intensity in $\text{cal cm}^{-2} \text{min}^{-1}$.
- c) Device for conveniently applying time marks
- d) Set-to-zero without affecting the adjustment of the instrument.
- e) Reduction of bearing friction by built-in vibrator.

Specifications

No.
58c

Robitzsch Type Radiation Recorder (Aktinograph)

Measuring range: 0 ... 2.0 cal/cm²/min

Diagram divisioned in: 0.1 cal/cm²/min

Recording-drum:

Ø 93,3 mm

93 mm height

writing width: 50 mm

time of running: app. 9 days

time of drum rotation: 1 day / 1 week, (according to choice)

Dimensions (mm): 310 width x 135 depth x 245 height

Weight: approx. 4 kg

Accessories (no extra charge):

1 set of recording charts

1 spare fibre-pen

1 bottle of silica gel

(100 charts for daily rotation or 54 charts for weekly rotation)

Consumables and Spare Parts

Spare recording drum with inside clockwork for rotation of:

901d

1 day

901w

1 week

recording charts

158c

1 set = 100 sheets for daily rotation

157c

1 set = 54 sheets for weekly rotation

58n

1 bottle of silica gel (cont. 100 gr)

78wfd

1 spare-cartridge-pen

78q

1 spare-metal-pen

1095v

1 bottle of recording ink (20ml)

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