

RG13, RG13H Rain Gauge



This instrument uses a tipping-bucket mechanism to produce a contact closure every time it receives a predetermined small quantity of rainfall (0.2 mm).

The body and funnel of the gauge are of aluminium alloy. An accurately machined septum-ring at the top gives an aperture of exactly 400 cm². The tipping-bucket mechanism is mounted inside the body on a cast aluminium-alloy base equipped with fixing slots, three levelling screws and a spirit level.

The mechanism consists of a divided bucket pivoted at its centre. Rain collects in the upper half. When this is full, the mechanism tilts and

discharges the collected water, allowing the other half of the bucket to begin filling.

A siphon device is fitted to the base of the funnel to control the rate of flow into the buckets. By ensuring a constant flow rate into the tipping bucket, calibration is made easier and accuracy improved. The alternate filling and discharging continue as long as rain is falling, and at each tilt, a magnet momentarily closes the contacts of a reed switch.

In the rain gauge of type RG13H, a heater element is provided inside the body in order to melt snow. The heater switches on at temperatures below +4 °C.

TECHNICAL DATA

Diameter of aperture	225 mm
Area of aperture	400 cm ²
Rainfall capacity	unlimited
Sensitivity (rainfall per pulse)	0.2 mm
Dimensions (height diameter)	390 300 mm
Weight	2.5 kg
Heater (in RG13H)	38 W/40 VAC
Thermostat operation (in RG13H)	Open at +11 °C (±3 °C) Close at +4 °C (±3 °C)