

Precipitation sensor with 200cm² funnel area



Description

The sensor is made up of a funnel collector with a circular area of 200cm² and a single tipping bucket. The calibrated collector area and the geometry of the collector prevents the rain from splashing in and out, according to WMO recommendations.

Every time the bucket is filled, its magnetic hinge tips and the instrument outputs an electrical signal that can be sent to an automatic data acquisition system. If precipitation is in a solid form, snow or hail, the instrument can measure the amount of water obtained from their melting.

The body is made up of an anodized aluminium cylinder and it is painted of white to obtain the maximum reflection of incoming solar radiation. The electromechanical system that reads the collected rain is placed inside. The collecting funnel is made up of anodized aluminium with a calibrated circular area of 200cm².

In the lower part of the collecting funnel a filter is placed to prevent that debris enter in to rain gauge. Moreover, there's the connector for the communication with the data acquisition system.

The optional heating system (model FAK030BA) is designed to have a fast melting of solid precipitation, avoiding anyway the production of too much heat that can cause the evaporation of a part of the liquid.



Rain gauge 200cm²



Rain gauge — typical application

Technical specifications may be varied without prior notice

Technical Specifications

Sensor type	Single bucket with magnetic hooking
Collector area	200cm ²
Measuring range	0-300mm/h
Accuracy	± 2% (test carried out with an intensity of precipitation of 24 mm/h)
Resolution	0,2mm of rain or equivalent snow
Operating range	0 ... +60°C -30 ... +60°C (with heating system)
Electrical output	Contatto reed N.A. (standard) Contatto reed N.C. (optional)
Heater (option)	Power supply: 24Vac Power Consumption: 40W @ 24Va
Dimensions	H: 300mm - Ø: 160mm
Weight	0,850 Kg
Manitenance	Periodic cleaning (suggested every 6 months)
Calibration	Calibration of the tipping bucket suggested every 2 years

Ordering codes

Rain gauge with reed	FAK030AA
Rain gauge with integrated heating system	FAK030BA
Bird spikes option	FAI637AA

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