

Meteobot® Rain - Datasheet

Meteobot® Rain is an advanced electronic pluviometer (rain gauge), designed for agriculture, meteorology, environmental monitoring and other purposes.

Rain enters the funnel, passes through a debris filter, and collects in one chamber of the tipping bucket. The bucket tips when it has collected an amount of water corresponding to 0.2 mm of rain per square meter. As the bucket tips, it sends an electric impulse to the electronic circuit board (data logger). The rain water drains out through the openings in the base of the rain gauge.

Meteobot® Rain has a large, 200 mm orifice (upper funnel opening) with a rain collection surface of 314 cm². This is more than 50% larger than typical rain gauges and provides for better repeatability and accuracy of measurement.

The shape is aerodynamically designed to minimize the raindrops that get blown out of the funnel under high winds. The rain gauge is made of tough, UV resistant ABS plastic. It has a built-in bubble level, which helps to install it accurately on a pole or a horizontal surface. The tipping bucket mechanism uses a high-strength neodymium magnet and an isolated reed switch, suited for harsh environments.

Meteobot® Rain is factory-calibrated with a resolution of 0.2 mm/m^2 .



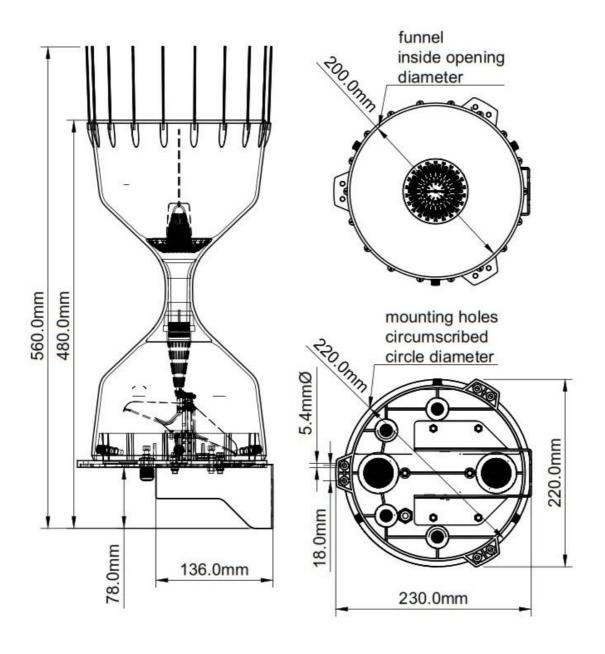
Specifications

Resolution	0.2 mm/m ²	
Operating range	0°C ÷ 70°C	
Rainfall accuracy	98% (up to 140 mm / hour)	
Rainfall intensity	0-1000 mm/hr (mathematical correction over 140 mm/hr)	
Orifice diameter	200 mm	
Collection area	314 cm ²	
Funnel profile	Double cone	
Mechanism	Double tipping bucket with normally open reed switch	
Output	Contact closure; 1 impulse = 0.2 mm/m ² ; typical impulse length: 80 ms	
Mounting	Pole (40-50 mm diameter) or horizontal surface	
Leveling	Built-in bubble level	
Cable	1.5 m rubber insulated (can be ordered with a longer one)	
Dimensions	48 x 23 x 21 cm (without bird spikes)	
Weight	1.62 kg	

Package

Size	Weight	HS Code
50 x 23 x 25 cm	2.1 kg	90158020





Dept.	Technical reference	Created by	Approved by		
		Meteobot 27/05/2024	100		
		Document type	Document status		
		Title	DWG No.		
		Rain Gauge			
			Rev. Date of issue Sheet		
			1.1		