



Air Sensor

ES-RG0

The tipping bucket rain gauge is recognized to be the standard for measuring rainfall and other precipitation in hydrological and environmental testing. The internal tipping bucket structure provides high accuracy in various rainfall intensity ranges. According to different materials, there are three types of the tipping bucket rain gauge: all stainless steel rain gauge, semi-stainless steel rain gauge, and ABS plastic rain gauge.

Rain Gauge Sensor



Overview

The tipping bucket rain gauge working principle is counting the number of times the tipping bucket falls. The tipping bucket is made of stainless steel and divided into two half-cone chambers with equal volume by a partition in the middle. It is a mechanical bistable structure. When one chamber receives water, the other chamber is waiting. When it rains, the rainwater collected by the water receiving port enters the metering bucket through the funnel. When the volume of the received rainwater reaches the predetermined value of 0.2mm, the chamber will overturn due to gravity and be waiting, and the other chamber will be in a state of receiving water. When the water receiving volume reaches the predetermined value, the bucket will overturn again and be waiting. Magnetic steel is installed on the sidewall of the tipping bucket, which scans from the side of the dry reed tube when the tipping bucket flips to make the dry reed tube on and off. That is, every time the tipping bucket is overturned, the dry reed tube will be switched on and send out a pulse or 485 signal. This is the working principle of the stainless steel tipping bucket rain gauge.



Rain Gauge Sensor Parameters

Rain Bearing Diameter	φ200mm
The Sharp Angle of Cutting Edge	40~45°C
Resolution	Default 0,2 mm, 0,5 mm optional
Measurement Accuracy	±%2 (indoor artificial precipitation ,subject to the drainage volume of the instrument itself)
Rain Intensity Range	0mm ~ 4mm / dak (allowable maximum rain intensity 8mm/min)
Output Mode	Pulse or standart RS485
Power Supply Range	4.5~30V
Maximum Power Consumption	0.24W
Working Temperature	0~50°C
Working Humidity	<95%(40°C)

Sipariş Bilgileri

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Modbus RS485 ile						M		
OLED Ekran Olmadan								0

