

Stainless tipping bucket rain gauge

Model ES-R400



Main features

- Thickened stainless steel, anti-corrosion and anti-rust
- Sensitive flipping, stable performance
- Tip bucket material ABS, stainless steel optional
- Cutting edge angle 40°~45°, eliminating random error
- Internal filter setting, effectively filtering impurities such as fallen leaves
- Support RS485, pulse, analog signal output
- Support dynamic monitoring of instantaneous rainfall, 24-hour rainfall, total rainfall, etc.

Compliance

The electromagnetic compatibility in accordance with the following applicable directives:
LVD 2014/35/EU Low Voltage
EMC 2014/30/EU
Electromagnetic Compatibility
EMC 2014/35/EU
Electromagnetic Compatibility

Introduction

ES-R400 all-stainless steel tipping bucket rain gauge is designed in the shape of a Chinese character "U" and is made of thickened all-stainless steel material, which has higher core stability. The leveling support plate is upgraded and thickened to be more stable. The reed switch adopts an integrated embedded structure, and the level bubble adopts a special base, which is beautiful and generous. The water outlet bin adopts a "maze-style" design and is also heightened to ensure that rainwater does not splash out when the bucket is turned over. The reed switch terminal is fixed to the bucket bracket; the precision adjustment nut adopts a "straight knurling" design to facilitate manual adjustment of precision on site; the rain inlet adopts a deep rain inlet by default, and a cylindrical filter device is used at the bottom, and a wrapped filter is equipped by default.

Application

Tipping bucket rain gauges are widely used in many fields, including meteorological observation, hydrological monitoring, agricultural irrigation, environmental protection and urban management, traffic management, etc.

Dimension

Unit:mm



Specification

Rain gauge cylinder diameter	Φ200mm
Resolution	default 0.2mm, optional 0.1mm, 0.5mm
Cutting edge acute angle	40°~45°
Measurement error	≤±3% (indoor artificial precipitation, subject to the discharge of the instrument itself)
Rain intensity range	0mm~4mm/min (maximum rain intensity allowed to pass 8mm/min)
Output model	4~20mA/0~2V/0~5V/0~10V, pulse type, 485 communication (standard MODBUS-RTU protocol)
Power supply range	4.5~30V
Max. power consumption	0.24W
Working environment	0~50°C, <95%(40°C)
Storage environment	-40~125°C, <80% (non-condensing)
Withstand voltage	≤100V (pulse type)
Withstand current	≤0.5A (pulse type)
Tipping bucket material	ABS or Stainless steel
Base material	ABS base, stainless steel stamping base
Rain inlet material	ABS rain inlet, stainless steel stamping rain inlet
Rain inlet filter	Standard or optional

Order guide

ES-R400	Tipping bucket rain gauge					
	CODE	Tipping bucket material				
	A	ABS				
	S	Stainless steel				
		CODE	Base material			
		A	ABS base			
		S	Stainless steel stamping base			
			CODE	Rain inlet material		
			A	ABS rain inlet		
			S	Stainless steel stamping rain inlet		
				CODE	Rain inlet filter	
				D	Standard rain inlet filter	
				N	None	
				CODE	Signal output	
				A	Analog output: 4~20mA/0~2V/0~5V/0~10V,	
				D	Digital output: RS485 (Modbus RTU), TTL	
				P	Pulse type	
ES-R400	A	A	A	N	A	Order code

