

BS400-09 Miniature Tipping Bucket Rainfall Sensor

BS400-09 miniature tipping bucket rainfall sensor is a hydrology, meteorological instrument used to measure the nature of rainfall, and it converts the precipitation into a pulse signal output. The model can be used in meteorology, hydrology, agriculture, forestry, field monitoring stations and other industries. Combined with rainfall recorder can be used to measure precipitation, precipitation intensity, precipitation time.

FEATURES

- Compact size for easy use
- High accuracy, good stability
- Outlet with insect-proof screen
- Well made tipping bucket with low resistance
- The main body made of high strength ABS
- Horizontal Bubble in the bottom



APPLICATIONS

- Meteorological monitoring
- Hydrologic monitoring
- Natural disaster monitoring
- Agrometeorological research
- Climate research

SPECIFICATIONS

Item	Specification
Collector	Diameter : Φ 114mm
Measured rainfall intensity	Max: 4mm/min
Allow rainfall intensity	Max: 8mm/min
Resolution	0.2mm(6.28mL)
Accuracy(2mm/min)	\pm 4%
Output	Pulses,RS485(12-24VDC supply)
Operating temperature	0-60°C@0%-100%RH
Main material	ABS
Weight(unpacked)	450g

WORKING PROCESS

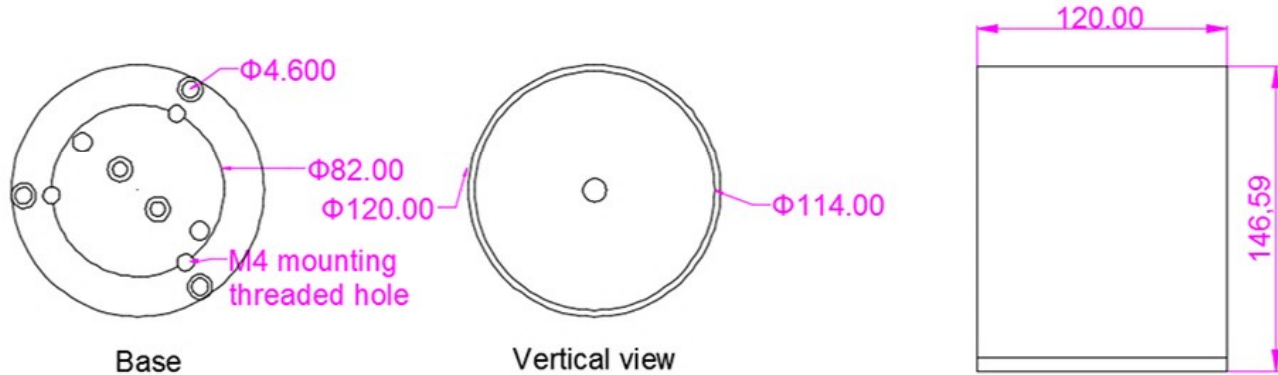
Rainfall is captured in the 114mm diameter collector funnel and is directed through a delivery pipe to fill a divided ABS injection molded tipping bucket device. The bucket is pivoted through its center and has a preset calibration to tip for 0.2 mm of rainfall. When the bucket is "full", it pivots and empties - this action magnetically closes and opens a reed switch, sending a pulse signal to the data logger or electronic counter. Through this tipping "seesaw" action, the other side of the bucket is aligned to receive the flow from the delivery pipe. This

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recording and tipping cycle continue with rainfall.

DIMENSION & MOUNTING

Fix the rainfall sensor on the bracket with three screw rods of M4. Keep the whole equipment at the best level to ensure the accuracy of rainfall data.



PARAMETER SELECTION TABLE

Remark	Series	Type	Output	Cable Length	
BS					
	400				
		09			
			A		Pulse
			B		RS485(supply:12-24VDC)
			C		Customization
				2000	Units:mm (typ)
				3000	Units:mm
				...	Units:mm

Example: BS400-09A1500 Output: pulse ,Cable Length:2m.