

# **R65P Economical Bucket Rainfall Sensor**



#### **1. Product Introduction**

R65P Economical Tipping Bucket Rainfall Sensor consists of rain gauge and measurement component. It is a hydrology and meteorological instrument, used to measure the rainfall, and it converts the precipitation into a pulse signal output. To satisfy the need of the transfer, manage, record and display of the information. 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 etc.

#### **2. Structural Features**

- Compact size for easy installation
- High accuracy and good stability
- Mesh in the funnel to prevent sundebris such as leaves & insects from entering rain sensor
- Well made tipping bucket with low resistance
- Main body made of high strength ABS
- Optional heating function in cold region
- Horizontal Bubble in the bottom

Item	Specification
Collector	Diameter: <b>Φ</b> 200mm, height: 271mm
Measuring range	≪4mm/min
Resolution	0.2mm
Accuracy	±2%
Max Operating voltage	30V DC
Communication	Reed switches(built in filter circuit)
Operating temperature	-20-80 °C
Main material	ABS
Weight(unpacked)	1kg

#### 3. Main Technical Indicators

#### 4. Working Principle

Rainfall is captured in the 200mm 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 0.2mm 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 recording and tipping cycle continues with rainfall.

#### 5. Dimension & Mounting

Adjust the balance foot screws to ensure that it is a horizontal position. Using three fastening screws to fix this three support legs at the platform to keep the entire apparatus at an optimum level, which ensures the accuracy of rainfall data.



Installation hole position No.1

Installation hole position No.2

## 6. Applications

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

## 7. Appendix: Rainfall Intensity Scale

Scale	24-hour rainfall(mm)
Light rain	1-9.9
Moderate rain	10-24.9
Heavy rain	25-49.9
Rainstorm	50-99.9
Torrential rain	100-200
Super-Torrential rain	>200