

## Rain Gauge Tipping Bucket TR-525I Rainfall Sensor



### Description

The TR-525I rain gauge is a freestanding receptacle for measuring precipitation. It contains an open top, which allows rainfall to fall into the upper portion, which is called the collector. Collected water is funnelled to a mechanical device (tipping bucket), which incrementally measures the rainfall accumulation and causes a momentary closure of a switch. As water is collected, the tipping bucket fills to the point where it tips over. This action empties the bucket in preparation for additional measurement. Water discharged by the tipping bucket passes out of the rain gauge with no need for emptying.

The TR-525I was designed to meet the need for a rugged and reliable rain gauge tipping bucket with high accuracy and low cost.

### Features & Benefits

- Interfaces to virtually all data acquisition systems
- Knife-edge collector optimizes rainfall catch
- Exceptional splash-out protection to compensate for wind errors
- Easy installation and maintenance
- Over 30 years in production
- Lightweight spun Aluminum Exterior
- Anodized aluminum collector for superior weather resistance
- Integral Bubble Level

### Installation & Maintenance

Installation consists of attaching the three sensor support legs to a firm platform (such as our MB-525 Mounting Base). Pole mounting on the mast of a weather station is available by securing to the included side bracket.

The sensor is dynamically calibrated at the factory and due to the nature of its operation should not require field calibration. Field maintenance should include occasional cleaning of the collector screen and inspection of the internal mechanism to make sure it is free from insects and debris. In some applications users may need to occasionally verify and document sensor accuracy with our FC-525 Field Calibration Kit.

### Specifications

Resolution:	0.01" English 0.2 mm Metric (optional)	Cable:	60', 22 gauge 2 conductor
Accuracy:	1.0% up to 2"/hr (50 mm/hr)	Switch:	Hermetically sealed reed switch
Collector diameter:	6.060" (154 mm) with knife-edge	Switch rating:	30 VDC @ 2 A, 115 VAC @ 1 A
Funnel depth:	6.4" (163 mm)	Switch Closure Time:	135 ms
Splash out protection:	>2" (50 mm)	Bounce Settling Time:	0.75 ms
Operating Temp:	32 to 125° F (0 to 50° C)	Pivot:	Hardened SS Jewel & Pivot
Storage Temp:	-40 to 160° F (-40 to 70° C)	Bucket:	UV Protected ABS
Humidity Limits:	0 to 100%	Level:	Integral Bubble Level
Weight:	2.5 lbs. (1.2 kg) 6 lbs. (2.7 kg) shipping	Warranty:	3 years
Height:	10" (255 mm)		