

PRECIPITATION GAUGES

FEATURES

- **Reliable and Accurate**
- **Tipping or Weighing Buckets**
- **English or Metric Measurements**
- **Optional Electric Heat**

Climatronics offers a variety of accurate and durable precipitation gauges. Models are available for both AC and DC powered systems, with or without heaters.

Tipping bucket gauges are available with screened funnels of 6 or 8-inch* diameter. Precipitation is channeled to a triangular bucket, which tips for every 0.01-inch or 0.1 mm of water collected. When the bucket empties it momentarily activates a sealed reed switch,** which sends an event message to the signal conditioner or data acquisition system. Upon tipping, the accumulated water is drained.

Both of Climatronics' tipping bucket gauges can be provided with optional electric heaters for AC powered systems. The heaters prevent data loss during freezing conditions and melt snow so the tipping bucket may measure the water equivalent. Either type of gauge is easy to install, requiring a level piece of ground that is free from obstruction or the use of Climatronics P/N 102271 Rain Gauge Mounting Bracket. Signal conditioners are available in modular form with an input range of 0-1 inch (0-2.5 cm) or 0-10 inches (0-25 cm), and corresponding standard output ranges of 0-1 or 0-5 VDC. A wind shield (P/N 100097WS) is available to prevent uplift near the sensor funnel, insuring a representative data capture. A precipitation calibrator (P/N 260-2595) for field calibration of the tipping bucket mechanism is also available.

Weighing bucket, optical, all-season, present weather and other specialty precipitation gauges can also be provided on special order.



* Optional metric sizes available

** Optional mercury switch available

SPECIFICATIONS

	6-Inch Tipping Bucket* (P/N 100508)	8-Inch Tipping Bucket* (P/N 100097)
PERFORMANCE		
Accuracy	±1% for rain rates of up to 2 in/hr (5.1 cm/hr) ±5% for rain rates of up to 10 in/hr (25 cm/hr)	±1% for rain rates of 1 to 3 in/hr (2.54 to 7.6 cm/hr) ±3% for rain rates of 0 to 6 in/hr (0 to 15.24 cm/hr)
Resolution/Sensitivity	0.01 in (0.25 mm) 0.004 in (0.1 mm)	0.01 in *(0.24 mm) 0.004 in (0.1 mm)
ELECTRICAL		
Power Requirements (without heat)	None†	None†
Output	Switch Closure	Switch Closure
Contact Rating	2A at 12 VDC	3A at 12 VDC
PHYSICAL		
Size	10.25 in H x 6.25 in diameter (26.0 cm H x 15.9 cm diameter)	18.25 in H x 8 in diameter (46.3 cm H x 20.3 cm diameter)
Weight	2.5 lbs (1.1 kg)	2.5 lbs (1.1 kg)
Operating Temperature (heated)	-40 to 140° F (-40 to 60° C)	-40 to 140° F (-40 to 60° C)

† Excitation provided by signal conditioner or data acquisition system

* Electric heat available, 200 watts



Climatronics Corporation
140 Wilbur Place
Bohemia, NY 11716-2404

TEL: 631-567-7300
FAX: 631-567-7585
E-Mail: sales@climatronics.com

Rev. Jan 10, 2002