



PRECIPITATION GAUGES – P/N 100097

FEATURES

- **Reliable and Accurate**
- **English or Metric Calibration**
- **Optional Electric Heat**
- **Teflon Coated Bucket**
- **Self-emptying**
- **Corrosion Resistant Materials**
- **Quality Construction**

The accurate measurement of rain and snow precipitation remains one of the most basic elements of meteorology. To enable accurate measurement of precipitation in all environments, Climatronics provides a series of instruments incorporating an eight (8) inch or a twelve (12) inch funnel diameter with a tipping bucket mechanism. The tipping bucket design allows accurate, repeatable measurements, requires no regular operator maintenance, and is economical and proven in operation. Each model in the P/N 100097 series of gauges is optimized to meet a particular site and sampling requirement.

A dual-chambered tipping bucket assembly is located below the collection funnel. When a precise amount of precipitation has been collected in one side of the bucket, gravity tips the assembly, which activates a reed switch. A momentary electrical contact closure is produced for each increment of rainfall. The sample is discharged through the base of the gauge. For locations where a significant amount of frozen precipitation can be expected, internal sensor heaters are available. These heating elements are thermostatically controlled to melt snow and frozen rain, but to avoid evaporative loss.

The heavy machined aluminum base provides a stable platform for the tipping assembly. The bucket is made from stainless steel and is Teflon coated to prevent retention of the sample. The bucket pivots are precision machined and fitted with jeweled bearings to reduce wear and friction. The funnel is powder coated aluminum and has two screens for preventing leaves and other debris from entering or clogging the gauge. A circular bubble-level and adjustable feet facilitate proper mounting of the unit. Major components are finished in catalyzed polyurethane paint, with a color and texture chosen to allow the sensor to blend into the environment. The 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. 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.



SPECIFICATIONS

Rain Gauges

Model Number	Funnel Diameter	Standard Calibration	Optional Calibration
100097-G0-H0	8 in (20.3 cm)	0.01 in (0.25 mm)	-H2 = 0.2 mm
100097-G0-H1	8 in (20.3 cm)	0.5 mm	N/A
100097-G1-H0	12 in (30.5 cm)	0.01 in (0.25 mm)	-H2 = 0.2 mm
100097-G1-H1	12 in (30.5 cm)	0.1 mm	N/A

Rain and Snow Gauges

Model Number	Funnel Diameter	Standard Calibration	Optional Calibration	Heater Voltage
100097-1-G0-H0	8 in (20.3 cm)	0.01 in (0.25 mm)	-H2 = 0.2 mm	115 VAC, 315 watts
100097-2-G0-H0	8 in (20.3 cm)	0.01 in (0.25 mm)	-H2 = 0.2 mm	220 VAC, 315 watts
100097-1-G0-H1	8 in (20.3 cm)	0.5 mm	N/A	115 VAC, 315 watts
100097-2-G0-H1	8 in (20.3 cm)	0.5 mm	N/A	220 VAC, 315 watts
100097-1-G1-H0	12 in (30.5 cm)	0.01 in (0.25 mm)	-H2 = 0.2 mm	115 VAC, 315 watts
100097-2-G1-H0	12 in (30.5 cm)	0.01 in (0.25 mm)	-H2 = 0.2 mm	220 VAC, 315 watts
100097-1-G1-H1	12 in (30.5 cm)	0.1 mm	N/A	115 VAC, 315 watts
100097-2-G1-H1	12 in (30.5 cm)	0.1 mm	N/A	220 VAC, 315 watts

Thermostat Set Point:	Funnel Heater	40°F (4.4°C)
	Base Heater	40°F (4.4°C)
Heaters:	Funnel	240 watts, composite with built-in thermostat
	Base	75 watts, composite with built-in thermostat
Operating Temperature:	-50°C to +50°C	
Accuracy:	at 0.5"/hr	±0.5%
	at 1" to 3"/hr	±1.0%
Switch:	Type	Reed
	Rating	10 mA, 28 VDC
Height:	8 in Gauges	18 in (46 cm)
	12 in Gauges	20.5 in (52 cm)
Weight:	8 in Rain Gauges	6 lbs (2.7 kg)
(not including cabling)	12 in Rain Gauges	7.5 lbs (3.4 kg)
	8 in Rain/Snow	6.5 lbs (3 kg)
	12 in Rain/Snow	11.5 lbs (5.2 kg)
Shipping Weight:	8 in Rain Gauges	8.5 lbs (3.9 kg)
(not including cabling)	12 in Rain Gauges	10 lbs (4.5 kg)
	8 in Rain/Snow	9 lbs (4 kg)
	12 in Rain/Snow	14 lbs (6.4 kg)

Finish: White gloss/beige textured powder coat and clear anodized aluminum

Ordering Information

Specify Model Number, calibration factor, cable length(s), and accessories

Accessories

102271, Mounting Bracket, 5 lbs
100097WS, Wind Screen, 75 lbs
260-2595, Field Calibrator, 2 lbs
M3226, Signal Cable
M2743, Heater Power Cable



Climatronics Corporation
140 Wilbur Place
Bohemia, NY 11716-2404

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