

Electrically Heated Rain and Snow Gage



Measure Rain, Snow, and Other Frozen Precipitation

Thermostat-controlled gage

Overview

The 52202, manufactured by R. M. Young, is a thermostat-controlled, electrically heated, tipping bucket rain gage. You can use it to measure rain, snow, and other frozen precipitation. Its catchment area of 200 cm² and measurement

resolution of 0.1 mm meet the recommendations of the WMO. This heated rain gage is compatible with most Campbell Scientific dataloggers, and it is used in environmental monitoring applications.

Benefits and Features

- ▶ High precision—tips at 0.1-mm increments
- Heating element melts snow and ice for year-round measurements
- **)** Compatible with many Campbell Scientific dataloggers

Detailed Description

The 52202 funnels precipitation into a bucket mechanism that tips when filled to the calibrated level. Each tip is marked by a magnetic reed switch closure that is recorded by a Campbell Scientific datalogger pulse count channel.

The 52202 has a thermostat-controlled internal heater that melts snow or other frozen precipitation. This heater requires a reliable source of 24 Vac power. A wall transformer is shipped with the 52202 that plugs into a wall socket to provide the required 24 Vac power.

Specifications

Sensor Type	Tipping bucket with magnetic reed switch (normally open)	Resolution	0.1 mm (0.004 in.)
		Operating Temperature Range	-20° to +50°C (heated)
Accuracy 2% up to 25 mm h ⁻¹ (1 in. h ⁻¹) 3% up to 50 mm h ⁻¹ (2 in. h ⁻¹)	² 2% up to 25 mm h ⁻¹ (1 in. h ⁻¹)		
	³ 3% up to 50 mm h ⁻¹ (2 in. h ⁻¹)	Humidity Range	0 to 100%



Power	18 W @ 24 Vac (for heater only)	
Heater Thermostat Set Point10°C ±3°C		
Contact Rating	24 Vac/dc (400 mA maximum)	
Mounting Pipe	30.5 cm (12 in.) length; 1 inch IPS, aluminum, unthreaded	
Catchment Area	200 cm ² (31 in. ²)	

Orifice Diameter	16 cm (6.3 in.)
Diameter	18.5 cm (7.3 in.)
Height	30 cm (11.8 in.)
Power Plug Weight	0.43 kg (0.95 lb)
Weight	1.16 kg (2.55 lb)

