



Measure Rain, Snow, and Other Frozen Precipitation

Thermostat-controlled gage

Overview

The 52202, manufactured by R. M. Young, is an electrically heated tipping bucket rain gage that measures 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 all 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 data loggers

Technical 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 an internal heater that melts snow or other frozen precipitation. This heater is thermostat controlled and 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)
Measurement Uncertainty	› 2% for up to 25 mm/h (1 in./h) › 3% for up to 50 mm/h (2 in./h)
Rainfall per Tip	0.1 mm (0.004 in.)
Operating Temperature Range	-20° to +50°C (heated)
Humidity Range	0 to 100%

Power	18 W @ 24 Vac (for heater only)
Heater Thermostat Set Point	10°C ±3°C
Contact Rating	24 Vac/dc (400 mA maximum)
Compliance with Standards	› 2011/65/EU RoHS Directive › 2015/863/EU RoHS Phthalates Amendment
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)

For comprehensive details, visit: www.campbellsci.eu/pn52202 



80 Hathern Road, Shepshed, LE12 9GX UK | +(0)1509 828888 | sale@campbellsci.co.uk | www.campbellsci.eu
AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | INDIA | SOUTH AFRICA | SPAIN | THAILAND | UK | USA

© 2022 Campbell Scientific, Ltd. | 04/10/2022