

Rain Collector Data Sheet



Application

Rain collectors come with mounting holes pre-drilled in the base and a built-in leveling trough to aid you in installing the rain collector. If mounted according to instructions, the Rain Collector is wind tunnel tested to be stable in winds up to 140MPH (224 Km/Hr).

The Rain Collector Heater is available for use with the Rain Collector units. This heater allows the Rain Collector to measure the moisture content of snowfall and protects the internal components from freezing rain.



Rain Collector Heater

Item Description

The Rain Collector is designed to meet the guidelines of the World Meteorological Organization. Rain enters the collector cone, passes through a debris-filtering screen, and collects in one chamber of the tipping bucket. The bucket tips when it has collected an amount of water equal to the increment in which the collector measures (0.01"). As the bucket tips, it causes a switch closure and brings the second tipping bucket chamber into position. The rain water drains out through the screened drains in the base of the collector.

Features

- Designed for years of accurate, trouble-free service
- Constructed of tough, UV resistant plastic
- Stainless steel adjustment screws allow fine-tuning of the calibration
- Tipping bucket
- Optional heater for cold weather operation
- Connect to OmniSite RTU's for remote rain analysis

Specifications

GENERAL

Sensor Type	Tipping bucket w/magnetic reed switch
Output	Contact closure
Attached Cable Length	40' (12 m)
Cable Type	4-conductor, 26 AWG
Connector	Modular connector (RJ-11)
Recommended Max Cable Length	900' (270 m)
Housing Material	UV-stabilized ABS plastic

DIMENSIONS

Rain Collector	8.75" diameter x 9.5" high (16.5 cm diameter x 24 cm high)
Collection Area	31 in ² (200 cm ²)
Weight	2 lbs. 3 oz. (1 kg)

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Ordering Information

Part Number: RAIN-01

Accessory Part Number: RAIN-01-HEATER

Instructions

1. Before using rain collector, cut and remove cable tie from tipping bucket located inside rain cone.
2. Cut off the end of the 4-pin modular connector on the modular "phone" cable.
3. Strip the black modular cable back about 4-5 inches and then strip the black, red, green and yellow cables back about 1 inch.
4. Land the black and red wires into input #5 on the top digital input terminal block
5. Land the yellow and green wires into the "+" on the top digital input terminal block.
6. Land a jumper wire from input #5 to the "-" on the bottom digital input terminal block.
7. You will then need to select Enter Setup/Setup All Inputs and then go to INP 5. Next press enter then change the selection None to read Rain.
8. To check to see if you have properly hooked up the rain collector, simply flip the teeter totter collector to see if Input #5 LED toggles on & off. You will also want to enable the OmniSite RTU and then go to View Inputs and scroll down to Rain Pulses to verify the totalized rain value is counting up.

Wiring

