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RGS-100 Siphoning Rain Gauge

- PROVEN TECHNOLOGY REPLACES TIPPING BUCKET
- EXTREMELY ACCURATE from 0 to 300 mm/hr. (0-11.8"/hr.)
- AUTOMATIC INSTANTANEOUS COLLECTION & RESPONSE
- O/P = 1 MOMENTARY SWITCH CLOSURE FOR EVERY 0.2 mm OR 0.01" of RAIN (optional o/p calibrated in mm or inches)
- O/P INTERFACES WITH ANY DATA LOGGER
- LIFETIME CALIBRATION
- NO MOVING PARTS
- WILL NOT CORRODE
- LIGHTWEIGHT & DURABLE
- 2 YEAR WARRANTY ON RAIN GAUGE
- 1 YEAR WARRANTY ON ELECTRONICS



Specifications

Flow rate:	0-300 mm/hr 0 - 11.8 inches/hour
Capacity:	Unlimited
Accuracy:	RATE: 0 - 200 mm/hr ; +/- 2% RATE: 200 - 300 mm/hr; +/- 5%
Power Supply:	9 to 18 volts, UNREGULATED 350 to 1,200 micro amps
Output:	1 momentary switch closure per 0.2mm (or 0.01") of rain
Operating Temperature:	0 to 65 degrees Celsius, 32 to 150 degrees F
Storage Temperature:	-40 to 70 degrees C, -40 to 174 degrees F

Physical Dimensions

Weight	: 2 kg (5 lbs)
Funnel Diameter:	112 mm (4.425 in)
Diameter:	120 mm (4.75 in.)
Length:	420 mm (16.5 in.)
Construction:	High density plastics
Mounting:	Aluminium & stainless steel universal joint bracket
Screen:	Keeps debris out
Level:	Used to level the RGS - 100

Options

Heater:	120 vac or 12 vdc
Output Connector:	Customers choice to fit their Data Loggers

THEORY OF OPERATION:

The RGS - 100 has no moving parts, so it NEVER needs routine calibration. Its revolutionary patented design enables it to make accurate measurements from 0 mm to 300 mm (0 A to 11.8A) of rainfall per hour.

The principle is simple. Water, collected by the funnel, is routed to the measuring chamber. A solid-state level sensor, connected to an electronic circuit, outputs a contact closure for every 0.2 mm (or 0.01" depending on calibration). When 1.2 mm (or 0.06") of water is collected, it is siphoned out on to the ground. The process repeats indefinitely. The siphoning action takes approximately 1 second. Therefore the mprocessor in the electronics filters out false readings, the gauge is very precise. The RGS - 100 can be connected to the digital input of any weather recorder.

