



Axinum Innovations & Technologies
670 Marlisa Place • Victoria • BC • Canada • V9B 4Y8
Voice: 250•478•0015 Fax: 250•478•0420
info@axinum.com
WWW.AXINUM.COM

RGS-100HL Siphoning Rain Gauge & Low Level Meter



- PROVEN TECHNOLOGY REPLACES TIPPING BUCKET
- MAY BE USED AS A RAIN GAUGE OR A LOW LEVEL FLOW METER.
- EXTREMELY ACCURATE from 0 to 500 mm/hr of rain or 0 to 5.0 litres /hr volume of water flow.
- AUTOMATIC INSTANTANEOUS COLLECTION & RESPONSE
- O/P = 1 MOMENTARY SWITCH CLOSURE FOR EVERY 0.2 mm of rain or 2.0 ml volume of water flow.
- DIGITAL 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: 0-500 mm/hr
0 - 19.68 inches/hour
Capacity: Unlimited

Accuracy:(Rain) RATE: 0 - 200 mm/hr ; +/- 2%
 RATE: 200 - 300 mm/hr; +/- 5%
 RATE: 300 - 500 mm/hr; -10%

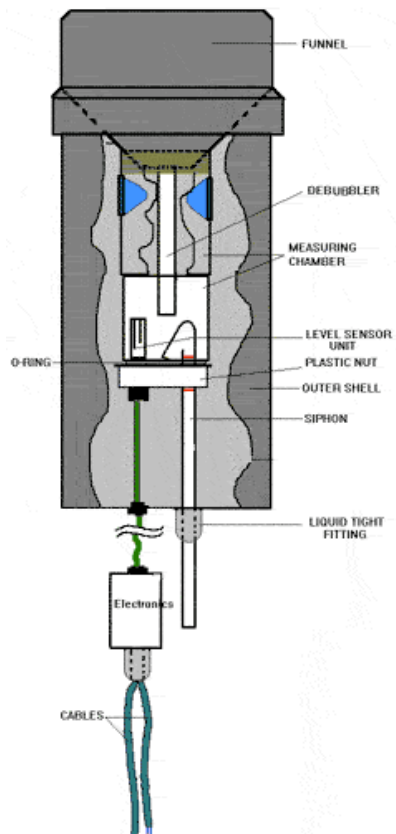
Accuracy:(Water Flow) RATE: 0 - 2.0 litres/hr ; +/- 2%
 RATE: 2.0 - 3.0 l/hr; - 5%
 RATE: 3.0 - 5.0 l/hr; -10%
 RATE: 0 - 2.0 litres/hr ; +/- 2%

Power Supply: 9 to 18 volts, UNREGULATED
 350 to 1,200 micro amps

Output: 1 momentary switch closure
 per 0.2mm of rain (2.0 ml of
 water flow)

Operating Temperature: 0 to 50 degrees Celsius
 32, 0 to 125 degrees F

Storage Temperature: -40 to 50 degrees C, -40 to 125
 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 - 100HL has no moving parts, so it NEVER needs routine calibration. Its revolutionary design enables it to make accurate measurements from 0 mm to 500 mm (0 A to 19.7A) of rainfall or 0 to 5.0 litres of water flow 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 (2.0 ml volume of water flow). When 1.2 mm (12 ml) of water is collected, it is siphoned out on to the ground. The process repeats indefinitely. Because the siphoning action takes approximately 1 second, and the electronics filters out false readings, the gauge is very precise. The RGS - 100HL can be connected to the digital input of any weather recorder.