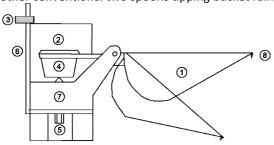


Rain-O-Matic Professional Rain Gauge

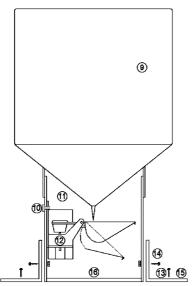
Technical specifications

Rain collector/Tipping spoon

RAIN-O-MATIC PROFESSIONAL measures the precipitation by means of a funnel (orifice 200 cm2), which leads the water down into the self-emptying tipping POM bucket, held in place by a hard ferrite magnet. The magnet always exerts just enough tension to allow the measuring bucket to empty in one quick movement (less than 300 ms) and then return to its normal position, ready to collect precipitation once again. This means the counter weight always remains the same opposite to other conventional two spoons tipping bucket raingauges.



- Self-emptying bucket 1.
- 2. PCB with reed switch
- 3. Screw to hold the entire unit
- 4. Magnet
- 5. Adjustment screw
- 6. Angle brackets
- Holder for bucket 7.
- Drip catcher 8.



- 9. Funnel with grille
- 10. Screw for whole measurement unit
- 11. Box with measurement unit
- 12. Measurement unit
- 13. 4 pcs. screw
- 14. 4 pcs. screw with nuts
- 15. 2 pcs. angle brackets
- 16. **Baseplate**

ASA (Acrylonitrile Styrene Acrylate)

The rain gauge made in molded thermoplastic, also known as ASA, which has high outdoor weather ability.

ASA is extremely resistant against the sun's UV radiation, it is frost- and heat resistant, standing all climatically conditions.

The product is widely used in the automotive industry as well as several other outdoor applications.

PCB

The electronic printed circuit board with individually tested and high quality reed switches protected against extreme weather conditions such as extreme frost or heat. This include corrosion from salt water due to the PCB is coated with weather-resistant varnish.

The printed circuit board comes in two versions

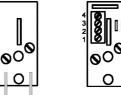
-Version 1: PCB No. 9601

(NC—normally closed) has male connection and 1 reed switch.

- Version 2: PCB No. 9602 (NC-Normally closed, NO-Normally open). Terminal strip with 4 connections / 2 outlets

PCB no. 9601

PCB no. 9602



and 2 reed switches connected-up in series by 1 k ohm and 1/4W resistor.

Typical switching times for PCB 9602

| Spoon | Terminal 1-2 Normally closed | Terminal 3-4 Normally open |
|-------|---------------------------------|-------------------------------|
| 2ml | 443ms | 352ms |
| | σ = 14mS | σ = 14mS |
| 4ml | 307ms | 278ms |
| | σ = 12mS | σ = 12mS |
| 5ml | 326ms | 301ms |
| | σ = 11mS | σ = 12mS |
| 10ml | 322ms | 305ms |
| | σ = 7mS | σ = 8mS |

 σ = Standard deviation

Filter design: Max 200msec recommended.

Resolution

- 0,10 mm
- 0,20 mm
- 0,25 mm
- 0,50 mm

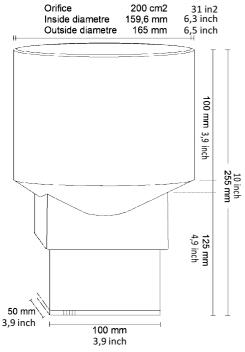
Patent

RAIN-O-MATIC PROFESSIONAL is patented and protected by the Law of Copyright. Patent no. UM-27598, AU pat. 565951, EPO Pat. 014212, US pat. 4.644.786, CA Pat. 126181, Japan Pat. 501208/83 Taiwan Reg. 74-201292 Components may NOT be used for other products or purposes without a written approval from PRONAMIC ApS. Violation implies immediate prosecution.



Rain-O-Matic Professional Rain Gauge

Measurements



Splash room height

incl. bottom: 170 mm 6,7 inch Weight incl. angle brackets: 380 g 13,5 oz

Capacity per minute with 12 tips

 0,10 mm:
 1,2 mm

 0,20 mm:
 2,4 mm

 0,25 mm:
 3,0 mm

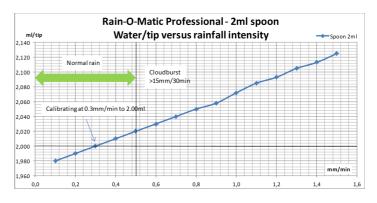
 0,50 mm:
 6,0 mm

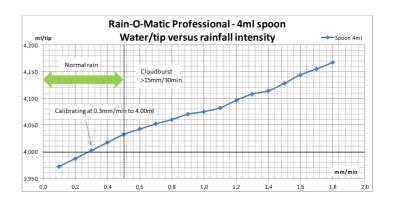
| Item list of complete collectors Rain collector with PCB no. 9601 resolution 0,10 mm | 300.021-10 |
|--|------------|
| Rain collector with PCB no. 9601 resolution 0,20 mm | 300.021-20 |
| Rain collector with PCB no. 9601 resolution 0,25 mm | 300.021-25 |
| Rain collector with PCB no. 9601 resolution 0,50 mm | 300.021-50 |
| Rain collector with PCB no. 9602 resolution 0,10 mm | 300.023-10 |
| Rain collector with PCB no. 9602 | 300.023-20 |

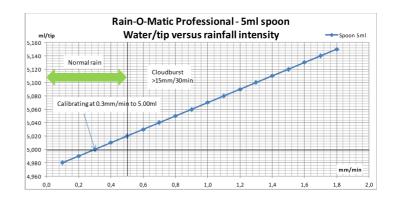
300.023-25

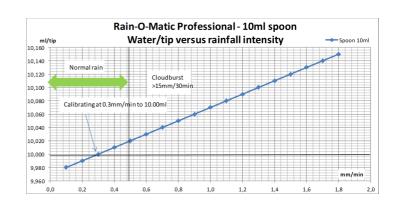
300.023-50

Rainfall intensity diagrams











Rain collector with PCB no. 9602

Rain collector with PCB no. 9602

resolution 0,20 mm

resolution 0,25 mm

resolution 0,50 mm



Rain-O-Matic Professional Rain Gauge

