

These patented "Rain-O-Matic" rain gauges have standard 200mm collection orifices, and use a unique patented "single spoon" (rather than the more conventional dual-tipping-bucket) to achieve better accuracy, consistency and linearity. These rain gauges measure the precipitation by means of a funnel (orifice 200 cm²), which leads the water down into the self-emptying tipping POM bucket/spoon, 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 once again collect precipitation. This means the counter weight always remains exactly the same, as compared to other conventional "two bucket" tipping bucket rain gauges. When the bucket/spoon "tips" a reed-switch is pulsed providing a signal which can be counted/measured by most commonly used data loggers. These rain gauge designs have a long track record of reliable/accurate operation in the field.

OPTIONS:

- ▶ Bird Guard
- ▶ Leaf Guard
- ▶ Spider Guard
- ▶ RG100H - Heated version of RG100 for Snow+Rain detection
- ▶ RG100S - Stainless Steel version of RG100

INTENDED PRODUCT APPLICATIONS/USE

This instrument is intended for use in various meteorological rainfall measurement applications, mounted on a mast or pole and connected to a data-logger.

- ▶ Weather Stations
- ▶ Water Works
- ▶ Waste Treatment Plants
- ▶ Hydro-power Stations
- ▶ Flood Management
- ▶ Hydrology
- ▶ Agriculture/Horticulture
- ▶ Research
- ▶ Irrigation
- ▶ Soil Moisture Management

Specification Summary

Typ. Range of operation:	0.0 .. 1.8mm/minute rainfall intensity (normal rainfall intensity is in the range 0.1 .. 0.5 mm/minute)
Resolution:	0.20mm per "tip" (0.10mm, 0.25 and 0.50mm also available)
Max. Rainfall Intensity:	2.4mm/min for 0.20mm/tip version (upto 6.0mm/min for 0.50mm/tip version)
Outputs:	2 reed switches are available, Normally-closed (NC), and Normally-open (NO). - These are "dry" reeds, so the connected equipment must provide for debouncing.
Output Pulse:	When a "tip" occurs, these reed switches are briefly operated (typ. 0.28 to 0.35sec pulse, pulsing the NC reed switch open, and pulsing the NO reed switch closed).
Accuracy:	+/-2%
Collector Orifice:	200cm ² area (159.6mm diameter orifice)
WMO8 Compliance:	RG100 only (standard collector/orifice size, deep collector/funnel to avoid splash-out and evaporation)
Calibration/Certificate:	Supplied with individual calibration certificate. Single adjustment screw for recalibration when needed.
Splash Room:	RG100: 290mm, RG101: 170mm
Materials:	RG100: tipping-bucket/spoon: POM, Outer-Shell/collector: ASA/Styrosun, Base: Aluminium Alloy RG100: tipping-bucket/spoon: POM, Outer-Shell/collector/body: ASA/Styrosun ...All UV/sun-resistant and frost-resistant, and suitable for long-term exposure in all climates.
Field Life:	10-20 years (with maintenance)
Cable/connector:	RG100: a mating connector is provided (cable is an option) RG101: a cable is not fitted as standard (cable is an option)
Drain:	RG100: a connection is provided for connection of a pipe to collect measured precipitation. RG101: precipitation drains out through the bottom of the gauge body.
Certifications:	CE (EMC, RoHS and WEEE Directives).
Special Variants:	Heated version of RG100, Stainless Steel version of RG100
Weight:	RG100: 1.3Kg, RG101: 0.38Kg (excl. mounting poles/brackets/cables).
Dimensions:	See diagrams (overleaf)
Warranty:	2 years



RG101



RG100

(WMO8 Compliant)

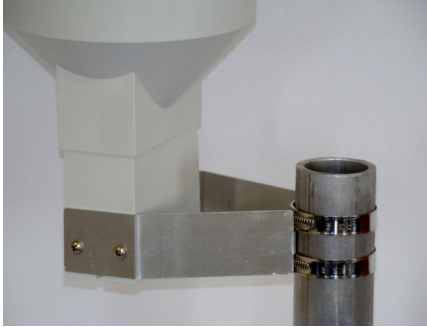
RAIN GAUGES

RG101 & RG100

Mounting Accessories: Because rain gauge mounting standards/requirements vary by both application and country, many mounting adaptors/accessories are available – please enquire.

Copyright/Patents: The design of these raingauges 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

Pole Mount adaptor for RG101:



Tipping "Spoon" used in both RG100 & RG101:

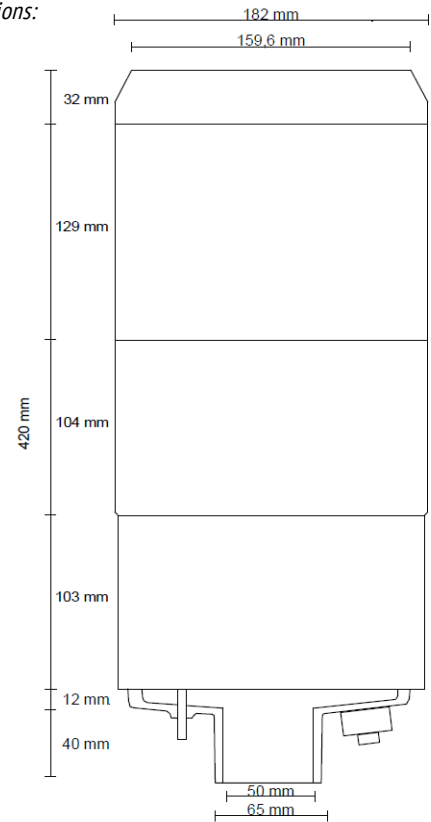


RG100H "heated" version for snow+rain detection:

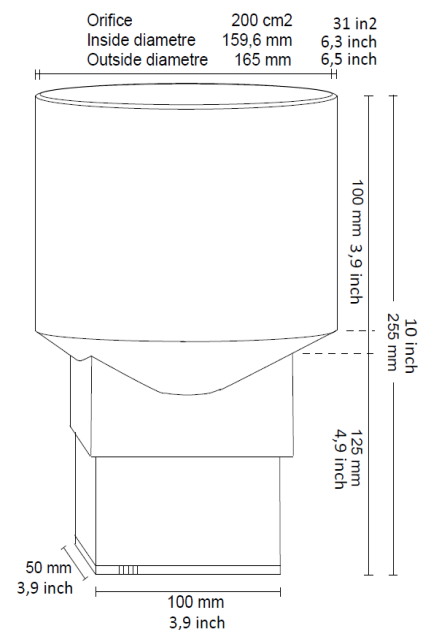


For more details on RG100H (heated) & RG100S (stainless-steel) versions, please contact our Sales Office.

RG100 Dimensions:



RG101 Dimensions:



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All dimensions are approximate.

Specification and Prices subject to change at any time without notice, contact our sales office for latest pricing and availability details.

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*CE Marked by manufacturer