



Tipping Bucket Rain Gauge (RG12R2 Dual Reed Switch Version)

Features

- Rugged Accurate & Reliable
- Minimal maintenance, 25 years+ deployment life
- Low friction, non-seizing bucket bearings
- Gold plated buckets for minimal retention
- Very stable calibration
- Built-in bubble level

Applications

- Rainfall distribution and intensity
- Workflow planning
- Safety and automation
- Flood mitigation programs
- Hydrology
- PLC, RTU & SCADA connectivity

The Envirodata RG12R2 range of siphon controlled tipping bucket rain gauges are professional instruments designed and constructed for long-term operation with minimal maintenance under all climatic conditions.

All materials are corrosion resistant. These proven instruments are accurate to within 1% for rainfall rates up to 200mm/hr and 3% up to 380mm/hr. The maximum rain rate is 700mm/hr

Method of Operation

Rain falling on the 203mm copper collecting funnel is directed through a siphon control unit which discharges as a steady stream into a two compartment bucket mounted in unstable equilibrium.

As each compartment fills, the bucket tilts alternately about its axis. Each tip causes the magnet to trigger the Dual Reed Switches.



This produces a contact closure in each reed switch corresponding to 0.2mm of rainfall.

Mounting Options

The RG12R2 series has optional mounting posts with levelling bracket, designed to place the rim at either 500mm or 1000mm above ground level to meet BoM guidelines. Brackets for rail mounting and for mounting off a vertical surface or post are also available.

Bird Protection

The BS34 is a ring of stainless steel bird deterrent spikes designed to prevent birds landing on the rim and fouling the collection funnel.

RG12R2 Special Order

The RG12R2 is a special order item. <Special Order - part # RG12R2>

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Version 170105



For our standard Tipping Bucket Rain Gauge refer to our RG12RM model, with Hall Effect triggering.

Specifications

Mechanism:	Tipping Bucket
Measurement Units:	Millimetres (mm)
Operating Range:	Up to 700 mm/hr
Accuracy:	± 1% to 200mm/hr ± 3% to 380mm/hr
Resolution:	0.2mm per tip
Materials:	
Collector:	Copper
Jacket:	Stainless Steel
Base:	Cast Marine Grade Aluminium
Bucket:	Gold Plated Brass
Bridge:	Anodized Marine Grade Aluminium
Fasteners:	Stainless Steel
Dimensions:	
• Funnel Diameter:	203mm
• Height:	300mm

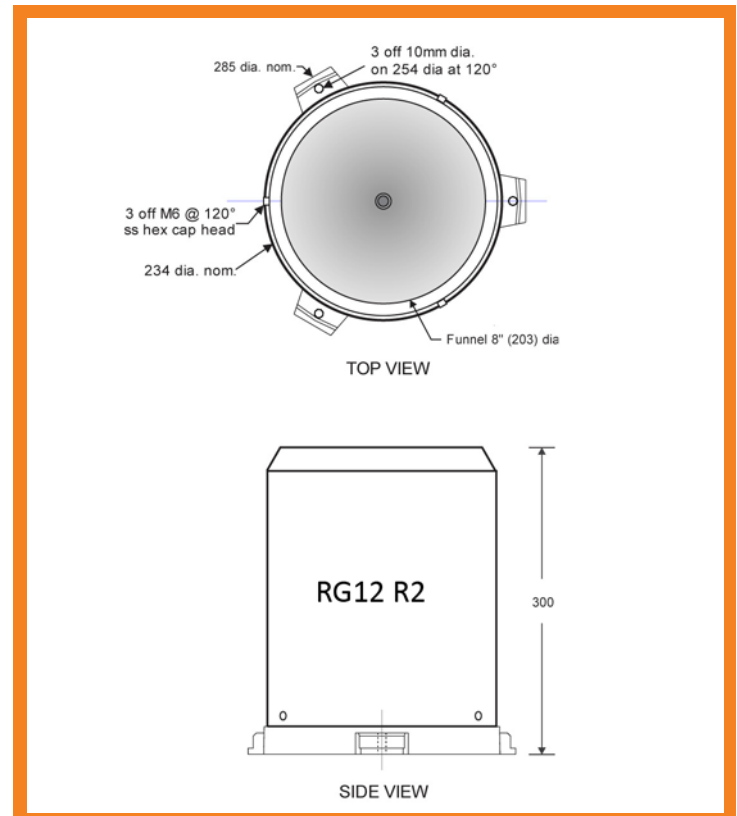
- Base Diameter: 285mm

Supply Voltage:

- 6 to 28 Volts DC Nominal

Recalibration Interval:

Field Calibration recommended every 12 months
Factory Calibration & Reed Switch Assembly replacement recommended every ten years



Configuration:

Model:	RG12R2
Detection System:	Two reed switches. Rated to 50V ac/dc at 0.5A non-inductive
Output Pulse Voltage:	Input Voltage
Debouncing:	No* Max bounce time 0.75 ms to 500mm/Hr
Pulse Stretching:	No* Contact closure is typically 50 to 150ms.
Power Consumption:	N/A
Cable Type: (UV stable)	N/A Screw termination (2.5mm ²)

*For the RG12R2 Model; Debouncing & Pulse Stretching must be done by the input device to maintain quoted accuracy

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