

Suitable for general meteorology – hydrology – flood warning systems – remote and long-term logging deployments

Datasheet

RIM-7499-BOM Rain Gauge

The RIMCO RIM-7499 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 2% for rainfall rates up to 250mm/hr.

The RIM-7499-BOM comes with a higher specification funnel and calibration than the RIM-7499-STD standard version. RIMCO RIM-7499-BOM rain gauges are specifically manufactured to stringent requirements including those of the Australian Bureau of Meteorology, the Environment Agency (UK) and the Danish Meteorological Institute (DMI).

Rain falling on the 203mm collecting funnel is directed through a siphon control unit and discharges as a steady stream into a two compartment bucket mounted in an unstable equilibrium. As each compartment fills, the bucket tilts alternately about its axis. Each tip forces a contact closure by magnetic means corresponding to 0.2, 0.25 or 0.5mm of rainfall according to bucket capacity. A calibration certificate is supplied with every RIM-7499 rain gauge.

Applications

- General meteorology
- Water resources studies
- Hydrology
- Flood warning systems
- Automatic logging systems
- Remote and long-term logging deployments

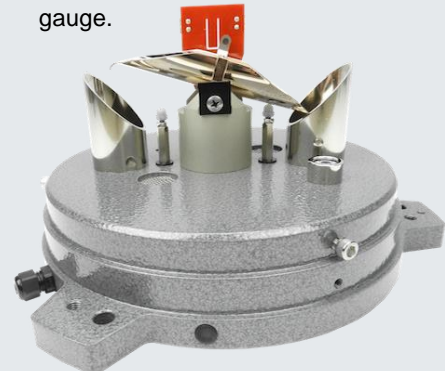
Features

- Rugged and corrosion resistant construction
- Minimal maintenance, 25 years+ deployment life
- Low friction, non-seizing bucket bearings
- Gold plated buckets for minimal retention
- Dual reed-switch output
- Stable calibration
- IP66 protection rating
- Built-in bubble level
- Optional heater for operation to -40°C
- Optional self-powered internal counter
- Mounting pedestal available



Specifications

Collector diameter	203mm (8") \pm 0.2mm
Resolutions	0.2mm 0.25mm 0.5mm (0.01" & 0.02" to special order)
Accuracy	\pm 2% to 250mm/hr \pm 4% from 250mm/hr to 350mm/hr
Contacts	Two normally open magnetically actuated reed switches Individual protection built-in
Reed-switch rating	50V AC/DC @0.5A non-inductive
Closure timing	50ms min 150ms max Max bounce time 0.75ms up to 350mm/hr
Termination	Screw termination (2.5mm ²)
Operating Temperature	0°C to +75°C (as standard) -40°C to +75°C (with heating option below)
Heating option	12 or 24V AC/DC (48W max) operation with electronic thermostatic control (P/N RIM7499-HOPT) Specify operating voltage at time of order
Data logger option	Several models available depending on application requirements. Some data loggers may be installed within the body of the rain gauge.



Dimensions

Height	300mm
Body diameter	230mm
Base diameter	280mm

Physical

Net weight	5.5kg
Shipping weight	7.0kg
Packing carton	330x330x430mm

Materials

Collector	Copper
Jacket	Stainless steel
Base	Cast marine grade Aluminium
Bucket	Gold plated brass
Bridge	Anodized marine Grade Aluminium
Switch holder	Delrin®
Fasteners	Stainless steel

Ordering Information

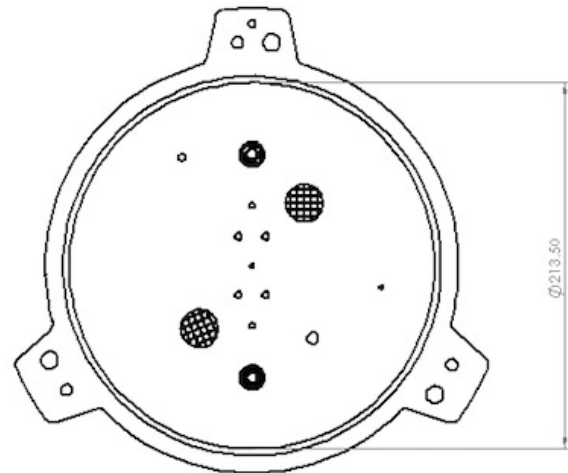
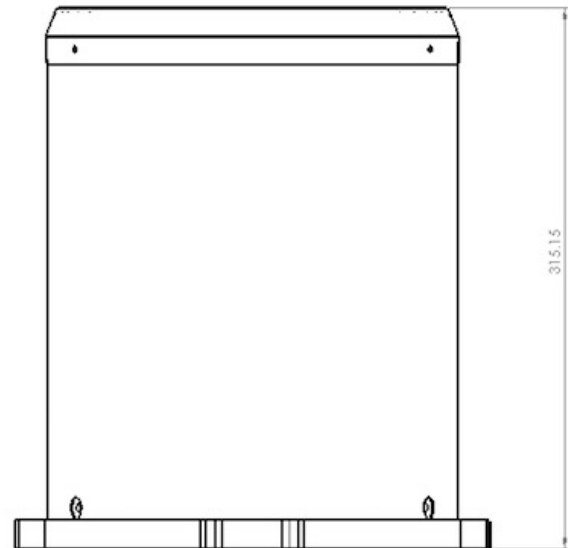
RIM-7499-020-BOM	Rain gauge 0.2mm bucket
RIM-7499-025-BOM	Rain gauge 0.25mm bucket
RIM-7499-050-BOM	Rain gauge 0.5mm bucket
	Order options as required

Note:

- RIM-7499-STD version is available for lower funnel collector specification.
- Non-siphon and imperial resolution versions are also available with differing accuracy specification.
- Other RIMCO rain gauge models are also available with 200cm² (RIM-8500) and 300mm (RIM-8300).

Mounting

A rugged mounting pedestal that elevates the collection rim 1m above ground level (P/N 8000PED1).



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