

RIM-7499-BOM Rain Gauge Data Sheet



The RIM-7499-BOM Rain Gauge

The RIMCO RIM-7499-BOM 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 380mm/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 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/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
- Built-in bubble level
- Optional heater for operation below -30°C
- Optional self-powered internal counter
- Mounting pedestal available.



RIM-7499-BOM Specifications

Collector Diameter	203mm (8'') ± 0.2mm
Resolutions	0.2mm (RIM-7499-020-BOM); 0.25mm; (RIM-7499-025-BOM); 0.5mm (RIM-7499-050-BOM); (0.01" & 0.02" to special order)
Accuracy	±2% to 200mm/hr.; ±3% to 380mm/hr.
Contacts	Two normally open magnetically actuated reed switches. Individual protection built-in.
Resolution	1.24 µm
Reed Switch Rating	50V AC/DC @0.5A non-inductive
Closure Timing	50ms min.; 150ms max.; Max bounce time 0.75ms; up to 500mm/Hr
Termination	Screw termination (2.5mm ²)
Heating Option	12 or 24V AC/DC (48W max) operation with electronic thermostatic control (P/N 7499-TCH); Please specify operating voltage when ordering.
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; Net Weight: 5.5kg; Shipping Weight: 7kg.
Material	Collector: Copper; Jacket: Stainless Steel; Base: Cast Marine Grade Aluminum; Bucket: Gold Plated Brass; Bridge: Anodized Marine Grade Aluminum; Switch Holder: Delrin; Fasteners: Stainless Steel.
Mounting Accessory	A rugged mounting pedestal that elevates the collection RIM 1m above ground level (P/N 8000PED1)

