

RIM-7499-STD Rain Gauge Data Sheet



The RIM-7499-STD 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 3% up to rainfall rates of 190mm/hr.

The RIM-7499-STD (standard) comes with a lower specification funnel and calibration than the RIM-7499-BOM (Bureau Of Meteorology) version. The STD version is ultimately the ideal low-cost alternative to the BOM version. The lower cost RIM-7499-STD can however, be ordered with the higher specification 1% BOM calibration.

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-STD Specifications

Collector Diameter	203mm (8'') ± 0.2mm
Resolutions	0.2mm (RIM-7499-020-STD); 0.25mm; (RIM-7499-025-STD); 0.5mm (RIM-7499-050-STD);
Accuracy	±3% to 380mm/hr.; Can measure up to 347mm/hr (4%); RIM-7499-BOM version is available for more accurate funnel collector specification. Non-siphon and imperial resolution versions are also available with differing accuracy specification.
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)

