

2400 Series 12 inch Tipping Bucket Rain Gauge

- Set- And-Forget Operation
- One-Piece Machined Aluminum Bucket
- Measures in 1 mm or 0.01 in. increments
- Accuracy of $\pm 1.5\%$ for 0 to 3.6 inches per Hour



PHONE: (800) 275-2080

HIGH SIERRA ELECTRONICS, INC.

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BENEFITS:

- Enables your system to meet the National Weather Service Standards.
- Record rainfall fluctuations from year to year to make better water management decisions.
- Use as an effective tool for Storm water Management to determine possible sewer overflows.
- Provide more specific and timely information on the potential for flooded roads.
- Combine with a Soil Moisture Probe for Irrigation Management.



DESCRIPTION:

The 2400 Series Tipping Bucket Rain Gauge provides state of the art technology for flood warning and rain monitoring applications. It consists of an aluminum 12 inch diameter powder coated housing, and a tipping bucket mechanism. The tipping bucket mechanism is available in 1mm or 0.01 inch tip increments (*Specify at time of order*). Also included is the base section with 1-3/8 inch access tube, leveling base plate and 25 ft. (7.6 m) signal cable with a MS Connector.

Water is directed into the tipping bucket mechanism which is adjusted to tip when 1 mm or 0.01 inch of rain is collected. As the bucket tips, it causes a magnet to pass over the sealed reed switch, closing the switch momentarily. The contact closure is then counted by the circuitry in your data collection equipment.

Water is discharged through drain holes at the base of the rain gauge housing. These holes are protected by screens to prevent insect entry.

An optional Tip Rate Compensator can be added to provide a typical accuracy specification of 0.5% over any range of rain rates. The compensator mounts directly on the rain gauge's input connector when using in conjunction with High Sierra Electronics's transmitter.

02-2400-00(F)

Environmental Monitoring Solutions

WEB SITE: www.highsierraelectronics.com E-MAIL: sales@highsierraelectronics.com

2400 Series 12 inch Tipping Bucket Rain Gauge

SPECIFICATIONS:

Event Resolution	1 mm or optional 0.01 inch
Accuracy (1 mm only)	± 1.5% for 0 to 3.6 inches per hour, ± 3% for 3.6 to 6 inches per hour
Sensor Type.	Form A 2 wire switch
Sensor Element.	Magnetically operated reed switch
Output	Pulse count
Signal Output	Normally open - momentary contact closure
Output Connector	5 Pin MS connector
Operating Temperature	32° to 140° F (0° to 60° C)
Storage Temperature	-58° to 158° F (-50° to 70° C)
Mounting.	Standpipe, pole, telemetry cabinet, and roof mounting plate optional
Materials	
Funnel	Spun aluminum
Sensor Housing	Aluminum cylinder
Catch Bucket	Machined aluminum
Base	Spun aluminum
Cable	Shielded 3-conductor 24 AWG
Cable Length.	25 ft (7.6 m)
Orifice Diameter	12 in (30.5 cm), 2.5 in (6.4 cm) Lip above screen
Dimensions	12 x 22.5 in (30.5 x 57.2 cm) (Dia x H)
Weight	11 lbs (5 kg)
Shipping Weight	13 lbs (5.9 kg)

ORDERING GUIDE:

Model 2400-15.	Rain Gauge, 12 inch (Cal: 1 mm/Tip): Includes: Tip Bucket Mechanism, Slotted Standpipe Mount Top Section with 25 ft (7.6 m) Cable.
Model 2400-28.	Rain Gauge, 12 inch (Cal: 1 mm/Tip): Includes: Tip Bucket Mechanism, Slotted Roof Mount Top Section with 25 ft (7.6 m) Cable.
Model 2400-30.	Rain Gauge, 12 inch (Cal: 1 mm/Tip): Includes: Tip Bucket Mechanism, Slotted Pole (2 in) Mount Top Section with 25 ft (7.6 m) Cable.
Model 2400-45.	Rain Gauge, 12 inch (Cal: 0.01 inch/Tip): Includes: Tip Bucket Mechanism, Slotted Standpipe Mount Top Section with 25 ft Cable.

OPTIONS/SPARE PARTS:

Model 2400-03.	Tipping Bucket Mechanism; (1 mm/Tip) Includes: 25 ft (7.6 m) Signal Cable.
Model 2400-10.	Tipping Bucket Mechanism; (0.01 inch/Tip) Includes: 25 ft (7.6 m) Signal Cable.
Model 2400-50.	Tip Rate Compensator: 1 mm/Tip.
Model 10-0012363-01	Precipitation Cable; Includes: 25 ft (7.62 m) Signal Cable with MS and Molex Connectors.
Model 5101-00.	*Extra Signal Cable, 3-Conductor, 24 AWG

* NOTE: If cable runs are longer than 250 ft (76.2 m), an in-line lightning protection device is recommended.

See www.highsierraelectronics.com for more specification and ordering details.

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