



# Tipping Bucket Rain Gauge 6011 Series

**allweatherinc** . . . . .

## Tipping Bucket Rain Gauge

The 6011 series Tipping Bucket Rain and Snow Gauges are standard, precision instruments for measuring rainfall volume and/or rate. Rain enters the gauge through a large funnel, the rim of which is protected by a metal ring to prevent distortion. Collected water passes through a debris-filtering screen and is funneled into one of the two tipping buckets inside the gauge. The bucket tips when a given amount of water has been collected; the amount is determined by gauge calibration. As the bucket tips, it causes a 0.1-second switch closure. The tip also brings a second bucket into position under the funnel, ready to fill and repeat the cycle. After the rain water is measured, it drains out through tubes in the base of the gauge. The drain holes are covered by screens to prevent insect entry.



## Available Models

The 6011-A & 6011-B rain gauges have an orifice diameter of approximately 8 inches and a resolution of either 0.01 inch or 0.1 mm. For additional details please see the Specifications section on the reverse side of this sheet.

All gauges utilize a mercury-wetted reed switch. The mercury wetting prevents the arcing that is common with reed switches and provides a better electrical contact.

## Features

AWI rain gauges are designed for many years of accurate, trouble-free operation. They utilize all metal construction, including aluminum, nickel-plated brass, and stainless steel. The built-in level and predrilled feet aid in proper installation. The calibrated measurement accuracy is  $\pm 0.5\%$  at a precipitation rate of 0.5 inch per hour.

**SENSORS**

# SPECIFICATIONS

| Parameter                                   | Specification                      |                  |
|---|------------------------------------|------------------|
|   | 6011-A                             | 6011-B           |
| Sensor Type                                 | Tipping Bucket                     |                  |
| Switch                                      | Form A reed, mercury-wetted        |                  |
| Output                                      | 0.1-second switch closure          |                  |
| Sensitivity                                 | 1 tip per 0.01"                    | 1 tip per 0.1 mm |
| Calibrated Accuracy                         | ±0.5% @ 0.5"/h                     |                  |
| Maximum Rain Rate                           | 250 mm/h                           |                  |
| Repeatability                               | ±3% @ 0.5"/h                       |                  |
| Collector Orifice                           | 8.214" diameter (208 mm)           |                  |
| Temperature Range                           | 32°F to 140°F<br>(0°C to +60°C)    |                  |
| Temperature Range<br>(with optional heater) | -13°F to 140°F<br>(-25°C to +60°C) |                  |

# ORDERING INFORMATION

| Part Number | Description  |
|-------------|--|
| 60103       | Rain Gauge Calibrator  |
| 60211       | Heater Option Kit for Model 6011-A/6011-B, 115 V AC  |
| 60212       | Heater Option Kit for Model 6011-A/6011-B, 230 V AC  |
| T600723     | 3-conductor, 16 AWG Heater Power Cable   |
| T600502     | 2-conductor, 20 AWG shielded cable to connect rain gauge to output device (specify length) |

# DIMENSIONS & WEIGHTS

| Parameter          | Specification                                |
|--------------------|--|
| Product Dimensions | 17.5" high x 8.5" diameter<br>(445 x 210 mm) |
| Product Weight     | 8 lb (3.6 kg)                                |
| Shipping Weight    | 15 lb (6.8 kg)                               |



All Weather Inc.

[www.allweatherinc.com](http://www.allweatherinc.com)

Phone: 916-928-1000  
USA Toll Free: 800-824-5873  
Fax: 916-928-1165

Rev. D 02/2020