

## 260-6011/6021/6028 Tipping Bucket Rain Gauges



Model 260-6011-A Tipping Bucket Rain Gauge

The Model 260-6011-A Tipping Bucket Rain 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 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. The Model 260-6011 & 260-6021 Series gauges have an orifice diameter of 8" and a resolution of either 0.01" or 0.1 mm. The Model 260-6018 & 6028 Series gauges feature a collection funnel 12" in diameter. This size provides the maximum sampling area, resulting in improved catch. These gauges can be calibrated to a resolution of 0.01" or 0.25 mm. All gauges utilize a mercury-wetted reed switch. The mercury wetting prevents arcing and provides a better electrical contact.

For areas where precipitation occurs in a frozen form, **Electrically Heated Rain and Snow Gauges** are available. Each gauge includes four separate heaters. A NiChrome wire heater wraps around the collection funnel to melt the precipitation for measurement. A second NiChrome wire heater warms the internal components and the gauge base to prevent refreezing of the water inside the gauge. In addition, a cartridge heater is plugged into each of the gauge drain tubes so that the measured precipitation passes out of the gauge freely without freezing on contact with the cold outside air. The funnel and the base heaters are controlled by thermostats; the drain tube heaters are continuous duty.

## **Specifications**

Sensor type: Tipping bucket
Output: 0.1-second switch closure
Switch: Form A reed, mercury-wetted
Contact rating: 2 Amp, 50 watt, 500 Vdc
Sensitivity: 0.01", 0.1 mm, or 0.25 mm

Accuracy: ± 0.5% at 0.5"/hr

Collector orifice:

260-6011/6021 Series: 8.214" diameter (208 mm) 260-6018/6028 Series: 12" diameter (305 mm)

Size:

260-6011/6021 Series: 8.25" dia x 17.5" H (210 mm x 445 mm) 260-6018/6028 Series: 12.5" dia x 18" H (318 mm x 457 mm)

Funnel: NiChrome wire in foil, 125 W, thermostatically controlled Base: NiChrome wire in foil, 150 W, thermostatically controlled

Thermostat setpoint:

Funnel heater: Approx. 11°C (52°F) Base heater: Approx. 6°C (42°F) Operating temperature: -25° to +40°C

Input voltage: 260-6021-A, 260-6021-B: 115 Vac, 60 Hz

260-6021-D: 230 Vac, 50 Hz

260-6028-A, 260-6028-B: 115 Vac, 60 Hz

Weight/shipping:

330-0316R

260-6011/6021 Series: 8 lbs/15 lbs (3.6 kg/6.8 kg) 260-6018/6028 Series: 16 lbs/30 lbs (7.3 kg/13.6 kg)

## Ordering Information

260-6011-A	Tipping Bucket Rain Gauge, 0.01"/tip
260-6011-B	Tipping Bucket Rain Gauge, 0.1 mm/tip
260-6018-A	12" Tipping Bucket Rain Gauge, 0.01"/tip
260-6018-B	12" Tipping Bucket Rain Gauge, 0.25 mm/tip
260-6021-A	Electrically Heated Rain & Snow Gauge, 0.01"/tip, 115 Vac
260-6021-B	Electrically Heated Rain & Snow Gauge, 0.1mm/tip, 115 Vac
260-6021-D	Electrically Heated Rain & Snow Gauge, 0.1mm/tip, 230 Vac
260-6028-A	Electrically Heated 12" Rain & Snow Gauge, 0.01"/tip, 115 Vac
260-6028-B	Electrically Heated 12" Rain & Snow Gauge, 0.25mm/tip, 115 Vac
260-60211	Heater Kit Option for 6011 Series, 115 Vac
260-60212	Heater Kit Option for 6011 Series, 230 Vac
330-0220	Signal Cable, 2-conductor, 20 AWG

Power Cable, 3-conductor, 16 AWG