



Precipitation Gauges

360 Series

The accurate measurement of rain and snow precipitation remains one of the most basic elements of hydrological and meteorology studies. The Model 360 Precipitation Gauge has been designed to measure rainfall and precipitation in remote and unattended locations. The 360 is a high quality instrument that provides accurate measurements with long term performance. The tipping bucket design allows accurate repeatable measurements, requires no regular operator maintenance, and is economical and proven in operation. All components of the 360 reflect the environmental requirements of a continuous duty instrument.

Features

- Roller on roller pivots
- Tipping bucket
- Reed switch
- Self-emptying
- Corrosion resistant materials
- Quality construction

Operation

A dual-chambered tipping bucket assembly is located below the collection funnel. When a precise amount of precipitation has been collected in one side of the bucket, gravity tips the assembly and activates a reed switch. A momentary electrical contact closure through the switch is



Provided for each increment of rainfall. The sample is discharged through the base of the gauge. For environments that can typically expect a significant amount of frozen precipitation, internal sensor heaters are available. The heating elements are thermostatically controlled to melt and measure the water content of snow and frozen rain, but to avoid evaporative loss.

Construction

The funnel and housing are anodized aluminum and finished with white powder coating. Stainless Steel is used for critical operation of the tipping bucket components of the tipping bucket pivots. The funnel has two screens for preventing leaves and other debris from entering or clogging the gauge. A circular bubble-level and adjustable feet facilitate proper mounting of the unit.



360 Series Specifications

Rain Gauges:	<u>360 Rain</u>	<u>362 Rain</u>	<u>364 Rain</u>
Plastic Tip Bucket Model #:	360	362	364
Metal Tip Bucket Model #:	360-1	362-1	364-1
Funnel Area:	200cm ²	200cm ²	200cm ²
Standard Calibration:	.25mm/tip or .01in/tip	.20mm/tip	.10mm/tip
Accuracy:	0 to 30mm/hr ± 1.0% 30 to 120mm/hr ± 5.0%	0 to 30mm/hr ± 1.0% 30 to 120mm/hr ± 5.0%	0 to 30mm/hr ± 1.0% 30 to 120mm/hr ± 5.0%
Switch:	Reed Switch, rated at 10mA, 28VDC	Reed Switch, rated at 10mA, 28VDC	Reed Switch, rated at 10mA, 28VDC
Operating Temperature:	0°C to +60°C	0°C to +60°C	0°C to +60°C
Height/ Weight:	30.5cm / .92kg	30.5cm / .92kg	30.5cm / .92kg
Rain & Snow Gauges:	<u>365 Rain & Snow</u>	<u>367 Rain & Snow</u>	<u>369 Rain & Snow</u>
Plastic Tip Bucket Model #:	365	367	369
Metal Tip Bucket Model #:	365-1	367-1	369-1
Funnel Area:	200cm ²	200cm ²	200cm ²
Standard Calibration:	.25mm/tip or .01in/tip	.20mm/tip	.10mm/tip
Accuracy:	0 to 30mm/hr ± 1.0% 30 to 120mm/hr ± 5.0%	0 to 30mm/hr ± 1.0% 30 to 120mm/hr ± 5.0%	0 to 30mm/hr ± 1.0% 30 to 120mm/hr ± 5.0%
Switch:	Reed Switch, rated at 10mA, 28VDC	Reed Switch, rated at 10mA, 28VDC	Reed Switch, rated at 10mA, 28VDC
Operating Temperature:	-25°C to +60°C	-25°C to +60°C	-25°C to +60°C
Thermostat Set Point for Funnel & Base Heater:	4.4°C	4.4°C	4.4°C
Heaters:	Funnel: 24VAC/DC, 75watt Base: 24VAC/DC, 50watt	Funnel: 24VAC/DC, 75watt Base: 24VAC/DC, 50watt	Funnel: 24VAC/DC, 75watt Base: 24VAC/DC, 50watt
Height/ Weight:	30.5cm / 1.1kg	30.5cm / 1.1kg	30.5cm / 1.1kg

Ordering Information:

Specify Model Number, calibration factor, cable length(s), and accessories.

Signal Cable: PN3519-xx (xx=length in feet)

Power Cable: PN3517-xx (xx=length in feet)

Accessories:

820440 Wind Screen: The improved Alter-design screen is constructed of 32 free-swinging separated leaves. It can greatly improve the accuracy of the precipitation catch by reducing local turbulence.