NEW!

Precipitation



YOUNG

Model TR-4
4” Rainfall Tipping Bucket

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The TR-4 low-cost rainfall sensor is a remote tipping bucket style rain gauge that measures liquid precipitation. The Rain Gauge is a freestanding receptacle for measuring precipitation. Through an opening at the top of the device, rain is collected and then funneled to a mechanical device, called a tipping bucket. As water is collected, the tipping bucket fills to the point that it tips over, causing a momentary closure of a switch to incrementally measure rainfall accumulation. This action empties the bucket in preparation for additional measurement. Water discharged by the tipping bucket passes out of the rain gauge with no need for emptying. The TR-4 was designed to meet the need for a rugged and reliable rain gauge tipping bucket without the high accuracy of a research grade sensor, or the associated cost.

Installation consists of attaching the three sensor support legs to a firm platform (such as our MB-525 Mounting Base). Pole mounting on the mast of a weather station is available by securing to the included side bracket.

Maintenance consists of routine cleaning of debris from the filter screen, and occasional calibration verification with our FC-500 Field Calibration Kit.

Key Features

- Interfaces with virtually all data acquisition systems
- Knife-edge collector optimizes rainfall catch
- Exceptional splash-out protection improves accuracy in high winds
- Easy installation and maintenance
- Rugged aluminum exterior
- Anodized and powder coated aluminum collector for weather resistance

Specifications

Resolution:	0.01” English
Accuracy:	0-1 in (25 mm per hour), ±2%
Range:	27” (700 mm) per hour
Collector Diameter:	3.9” (100 mm) with knife-edge
Funnel Depth:	3” (76 mm)
Splash Out Protection:	>1.5” (38 mm)
Operating Temp:	32-125° F (0-52° C)
Storage Temp:	-40-160° F (-40-71° C)
Humidity Limits:	0-100%
Weight:	2 lbs
Height:	6” (152 mm)
Cable:	10’, 22 gauge, 2 conductor
Switch:	Momentary potted reed switch
Switch Rating:	30 VDC @ 2 A, 115 VAC @ 1 A
Switch Closure Time:	135 ms
Bounce Settling Time:	0.75 ms
Pivot:	Ground bronze pivots with hardened stainless steel shaft
Bucket:	Black ABS injection molded
Level:	Integral bubble level
Warranty:	3 years

Ordering Information

Model #: TR-4
Description: Rain Gauge, 4” collector, English

Optional Parts / Accessories:

FC-500	Field Calibration Kit
HOBO	Datalogger and Software
BB-525	Bird Repellent
Cable	Additional Cable

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