

Rain Gauge Tipping Bucket

TR-525M Rainfall Sensor



Description

The Texas Electronics, Inc. TR-525M Rainfall Sensor is a remote tipping bucket style rain gauge that measures the amount of liquid precipitation.

The TR-525M rain gauge is a freestanding receptacle for measuring precipitation. It contains an open top, which allows rainfall to fall into the upper portion, which is called the collector. Collected water is funneled to a mechanical device (tipping bucket), which incrementally measures the rainfall accumulation and causes a momentary closure of a switch. As water is collected, the tipping bucket fills to the point where it tips over. 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-525M was designed to meet the need for a rugged and reliable metric rain gauge tipping bucket with high accuracy and low cost.

Features & Benefits

- 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 aluminum collector for weather resistance
- Integrated bubble level

Specifications

Resolution:	0.1 mm Metric
Accuracy:	50 mm per hour; +/-1%
Range:	27" (700 mm) per hour
Collector diameter:	9.66" (245 mm) with knife-edge
Funnel depth:	7.2" (183 mm)
Splash out protection:	>2" (50 mm)
Operating Temp:	32 to 158° F (0 to 50° C)
Storage Temp:	-40 to 185° F (-40 to 70° C)
Humidity Limits:	0 to 100%
Weight:	8 lbs.
Height:	12" (305 mm)
Cable:	10', 24 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

Installation & Maintenance

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 FC500 Field Calibration Kit.

Ordering Information

Model #: TR-525M
Description: Rain Gauge, 25 mm collector, Metric

Optional Parts / Accessories

HOBO Pendant Datalogger
MB-525 Pole Mounting Base
FC-500 Field Calibration Kit
BB-525 Bird Repellent
HT-525 Heater, 120 VAC