NEW!

Precipitation



YOUNG

# Model TR-525M-S
# 9.66” Rainfall Tipping Bucket

# YOUNG Model TR-525M-S 9.66” Rainfall Tipping Bucket



The TR-525M-S Rainfall Sensor is a siphoning tipping bucket mechanism that measures the amount of liquid precipitation with an extended range of accuracy. The siphon allows control of the “flow rate” of accumulated precipitation. This metering geometry assures higher levels in both accuracy and repeatability during periods of extremely heavy rainfall. 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-S was designed to meet the need for a rugged and reliable metric rain gauge tipping bucket with high accuracy and low 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
- Rugged aluminum exterior
- Anodized aluminum collector for weather resistance
- Integrated bubble level

## Specifications

| | |
|---|---|
| Resolution: | 0.1 mm Metric |
| Accuracy: | 0-10 in. (254 mm) per hour, ±2%<br>10-20 in. (508 mm) per hour, ±3% |
| 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: | 32-158° F (0-70° C) |
| Storage Temp: | -40-185° F (-40-85° C) |
| Humidity Limits: | 0-100% |
| Weight: | 2 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 PP injection molded |
| Level: | Integral bubble level |
| Warranty: | 3 years |

## Ordering Information

**Model #:** TR-525M-S
**Description:** Rain Gauge, 245 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 |

**R.M. Young Company**
2801 Aero Park Drive
Traverse City, Michigan 49686 USA
Tel: (231) 946-3980 Fax: (231) 946-4772
Email: met.sales@youngusa.com
Web: www.youngusa.com

CE

*Complies with applicable CE directives.*
*Specifications subject to change without notice.*

Copyright © 2026 R.M. Young Company, Printed in U.S.A. 2026