

"Relied on Worldwide in the Most Extreme Conditions"

# **Rain Gauge Tipping Bucket**

#### TR-525-W2 Series Rainfall Sensor



# **Description**

The Texas Electronics, Inc. TR-525-W2 Rainfall Sensor with a WMO standard 200mm diameter funnel 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-525-W2 was specifically designed to meet the National Weather Service & World Meteorological Organization requirements for rainfall measurement.

#### **Features & Benefits**

- Meets WMO requirements for a 200mm collector.
- 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
- Over 30 years in production
- Lightweight aluminum (anodized and powder coated) exterior for weather resistance
- Integrated bubble level

#### **Specifications**

Resolution:	0.1mm, 0.2mm, 0.5mm
	1.0mm (additional fee), 0.01"
Accuracy:	0-2 in. (50 mm) per hour; +/-1%
Range:	700 mm per hour (27")
Collector diameter:	200 mm with knife-edge
Funnel depth:	163 mm (6.4")
Splash out protection:	50 mm (2")
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:	1.8 lbs
Height:	11.125"
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

### **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 FC-500 Field Calibration Kit.

# Ordering Information

Model #: TR-525-W2

Description: Rain Gauge, 200mm collector

(Please specify calibration)

Optional Parts / Accessories

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

Texas Electronics, Inc. 4230 Shilling Way

Dallas, TX 75237 Tel.214-631-2490 Fax.214.631.4218

www.texaselectronics.com