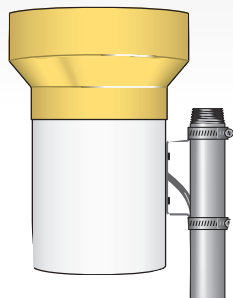


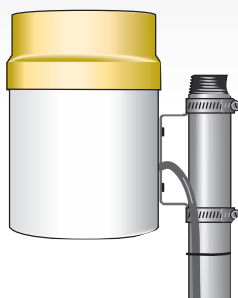


## TE525, TE525WS, and TE525MM

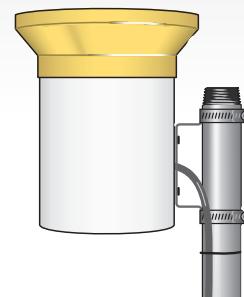
Texas Electronics Tipping Bucket Rain Gages



The TE525WS conforms to the National Weather Service recommendation for an 8-inch funnel orifice.



The TE525 is widely used in environmental monitoring applications.



The TE525MM measures rainfall in metric rather than US units.

### Overview

The TE525-series tipping bucket rain gages are manufactured by Texas Electronics. They funnel precipitation into a bucket mechanism that tips when filled to a calibrated level. A magnet attached to the tipping mechanism actuates a switch as the bucket tips. The momentary switch closure is counted by the pulse-counting circuitry of Campbell Scientific dataloggers.

### Benefits and Features

- › High precision
- › Integral bubble level
- › Compatible with all Campbell Scientific dataloggers (including the CR200(X) series)
- › Compatible with the CWS900-series interfaces, allowing it to be used in a wireless sensor network

### Mounting

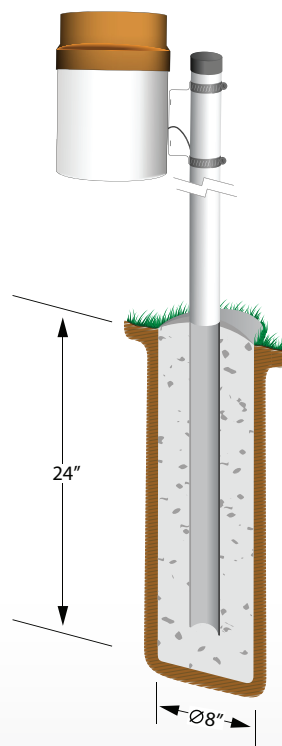
The TE525-series rain gages mount to a CM300-series Mounting Pole or a user-supplied 1.5 in. IPS pole. Several pedestal options are available to secure a CM300-series pole to the ground (see Ordering Information on page 2). Accurate measurements require the gage to be level.

### Wind Screen

Campbell Scientific offers the 260-953 Wind Screen to help minimize the affect of wind on the rain measurements. This wind screen consists of 32 leaves that hang freely and swing as wind moves past them.

### Snowfall Adapter

Campbell Scientific's CS705 Snowfall Conversion Adapter uses antifreeze to melt snow, allowing the TE525WS to measure the water content of snow. The CS705 cannot be directly used with either the TE525 or TE525MM. However, both the TE525 and TE525MM can be converted to a TE525WS by returning them to Campbell Scientific. For more information, refer to the CS705 brochure.



At left is a TE525 mounted onto a CM310 pole that is embedded directly in a concrete pad (-NP no pedestal base option).

questions & quotes: 435.227.9000

[www.campbellsci.com/te525ws-l](http://www.campbellsci.com/te525ws-l)



## Ordering Information

### Tipping Bucket Raingages

Enter the cable length, in feet, after the -L. Recommended length is 25 ft, but many customers will order a 50 ft cable to place the gage away from the tower or tripod. Must choose a cable termination option.

**TE525WS-L** Tipping bucket with 8 inch diameter orifice and 0.01 in. tips.

**TE525-L** Tipping bucket with 6 inch diameter orifice and 0.01 in. tips.

**TE525MM-L** Tipping bucket with 24.5 cm diameter orifice and 0.1 mm tips.

### Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in a connector for attachment to a prewired enclosure.
- CWS** Cable terminates in a connector for attachment to a CWS900-series interface. Connection to a CWS900-series interface allows this sensor to be used in a wireless sensor network.
- C** Cable terminates in a connector for attachment to a CS110 Electric Field Meter or ET107 weather station.
- RQ** Cable terminates in a connector for attachment to a RAWS-P Permanent Remote Automated Weather Station. This option is not offered for the TE525MM.

### Mounting Poles

**CM300** 23 inch Mounting Pole with Cap

**CM305** 47 inch Mounting Pole with Cap

**CM310** 56 inch Mounting Pole with Cap

### Pedestal Options for Mounting Poles (choose one)

- NP** No Pedestal Base
- PJ** CM340 Pedestal J-Bolt Kit
- PS** CM350 Pedestal Short Legs (23 in. legs)
- PL** CM355 Pedestal Long Legs (39 in. legs)

### Common Accessories

**CS705** Snowfall adapter for the TE525WS

**10869** Four one-gallon containers of 50:50 PG:E Antifreeze; only U. S. ground shipments

**CM270** CM270 Mounting Kit

**260-953** Novalynx Alter-type Rain Gage Wind Screen

## Specifications

	TE525	TE525WS	TE525MM
<b>Sensor Type</b>	tipping bucket/potted magnetic momentary contact reed switch		
<b>Switch Ratings</b>	30 Vdc at 2 A; 115 Vac at 1 A; closure time: 135 ms; bounce settling time: 0.75 ms		
<b>Bucket Material</b>	white powder coated spun aluminum		
<b>Funnel Collector Material</b>	gold anodized spun aluminum		
<b>Screen Material</b>	gold anodized spun aluminum		
<b>Locking Snap Ring Material</b>	stainless steel		
<b>Operating Temperature</b>	0° to +50°C (32° to 125°F)		
<b>Resolution</b>	1 tip		
<b>Volume per Tip</b>	4.73 ml/tip (0.16 fl. oz/tip)	8.24 ml/tip (0.28 fl. oz/tip)	4.73 ml/tip (0.16 fl. oz/tip)
<b>Rainfall per Tip</b>	0.01 in. (0.254 mm)		0.1 mm (0.004 in)
<b>Accuracy</b>	1.0% up to 2 in./hour (50 mm/hr)		
<b>Knife Edge Funnel Collector Diameter</b>	15.4 cm (6.1 in)	20.3 cm (8 in)	24.5 cm (9.7 in)
<b>Height</b>	24.1 cm (9.5 in)	26.7 cm (10.5 in)	29.2 cm (11.5 in)
<b>Tipping Bucket Weight</b>	0.9 kg (2 lb)	1 kg (2.2 lb)	1.1 kg (2.4 lb)
<b>Cable</b>	2-conductor shielded cable		
<b>Cable Weight</b>	0.1 kg (0.2 lb) per 10 ft length		
<b>Warranty</b>	three year		