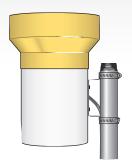


VHEN MEASUREMENTS MATTER

TE525, TE525WS, and TE525MM

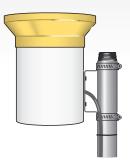
Texas Electronics Tipping Bucket Rain Gages



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

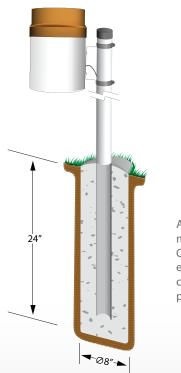
The TE525-series rain gages mount to a CM300-series Mounting Pole or a user-supplied 1.5 in. IPS pole. Several pedestal options are available to secure a CM300-series pole to the ground (see Ordering Information on page 2). Accurate measurements require the gage to be level.

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).



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 CWS900series 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	
Sensor Type	tipping bucket/potted magnetic momentary contact reed switch			
Switch Ratings	30 Vdc at 2 A; 115 Vac at 1 A; closure time: 135 ms; bounce settling time: 0.75 ms			
Bucket Material	white powder coated spun aluminum			
Funnel Collector Material	gold anodized spun aluminum			
Screen Material	gold anodized spun aluminum			
Locking Snap Ring Material	stainless steel			
Operating Temperature	0° to +50°C (32° to 125°F)			
Resolution	1 tip			
Volume per Tip	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)	
Rainfall per Tip	0.01 in. (0.254 mm)		0.1 mm (0.004 in)	
Accuracy		r)		
Knife Edge Funnel Collector Diameter	15.4 cm (6.1 in)	20.3 cm (8 in)	24.5 cm (9.7 in)	
Height	24.1 cm (9.5 in)	26.7 cm (10.5 in)	29.2 cm (11.5 in)	
Tipping Bucket Weight	0.9 kg (2 lb)	1 kg (2.2 lb)	1.1 kg (2.4 lb)	
Cable	2-conductor shielded cable			
Cable Weight	0.1 kg (0.2 lb) per 10 ft length			
Warranty	three year			

5