TE525-series

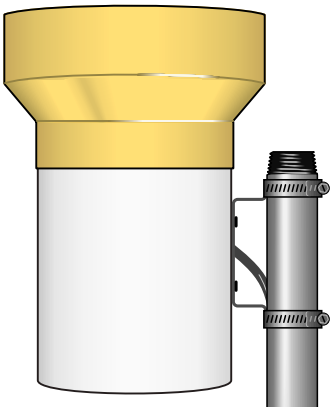
Texas Electronics Tipping Bucket Rain Gages

CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

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.

Three models are available:

- **TE525WS**—provides an 8-inch diameter orifice, and measures in 0.01-inch increments
- **TE525**—provides a 6-inch diameter orifice, and measures in 0.01-inch increments
- **TE525MM**—provides a 9.6-inch orifice, and measures in 0.1-mm increments



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

Mounting

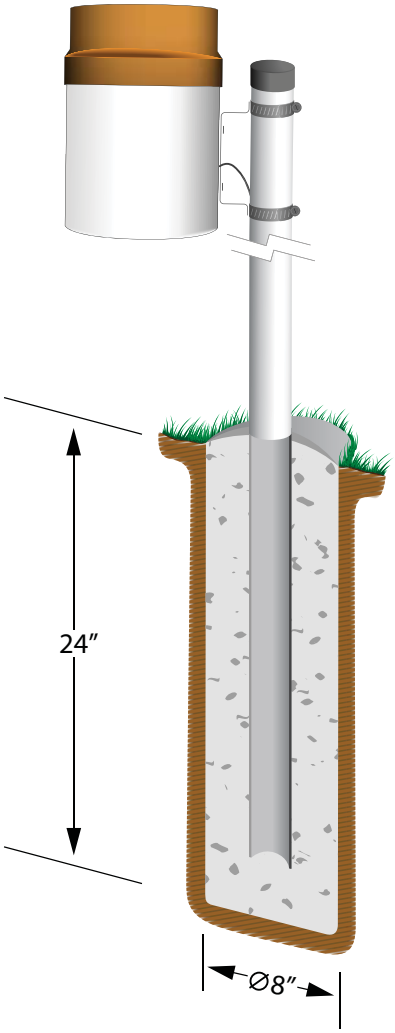
The TE525-series rain gages mount to a CM300-series Mounting Pole or a user-supplied 1.5" IPS pole. Several pedestal options are available to secure a CM300-series pole to the ground (see Ordering Information on page 2). Accurate measurements require the gage to be level.

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 about the CS705, refer to the CS705 brochure.

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 the wind moves past them.



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

Ordering Information

Tipping Bucket Raingages

Recommended cable length is 25 feet, but many customers will order a 50-ft cable to place the gage away from the tower or tripod.

TE525WS-L Tipping bucket with 8-inch diameter orifice and 0.01-inch tips. Enter cable length (in feet) after the -L. Must choose a cable termination option (see below).

TE525-L Tipping bucket with 6-inch diameter orifice and 0.01-inch tips. Enter cable length (in feet) after the -L. Must choose a cable termination option (see below).

TE525MM-L Tipping bucket with 24.5 cm diameter orifice and 0.1-mm tips. Enter cable length (in feet) after the -L. Must choose a cable termination option (see below).

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 connector for attachment to a prewired enclosure.

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-inch legs)

-PL CM355 Pedestal Long Legs (39-inch legs)

Common Accessories

CS705 Snowfall adapter for the TE525WS

10869 Four one-gallon containers of 50:50 PG:E Antifreeze; only US ground shipments

260-953 Novalynx Alter-type Rain Gage Wind Screen

Specifications

Sensor type: Tipping bucket/magnetic reed switch

Material: Anodized aluminum

Temperature: 0° to +50°C

Resolution: 1 tip

Cable: 2-conductor shielded cable

Rainfall per Tip
- **TE525WS, TE525:** 0.01 inches (0.254 mm)
- **TE525MM:** 0.004 inches (0.1 mm)

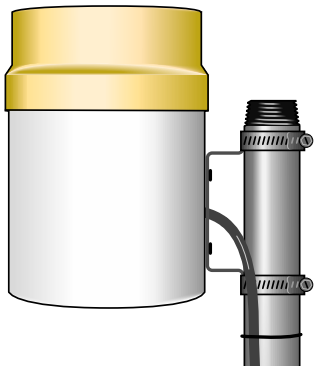
Funnel Collector Diameter
- **TE525WS:** 8 inches (20.3 cm)
- **TE525:** 6.06 inches (15.4 cm)
- **TE525MM:** 9.66 inches (24.5 cm)

Height
- **TE525WS:** 10.5 inches (26.7 cm)
- **TE525:** 9.5 inches (24.1 cm)
- **TE525MM:** 11.5 inches (29.21 cm)

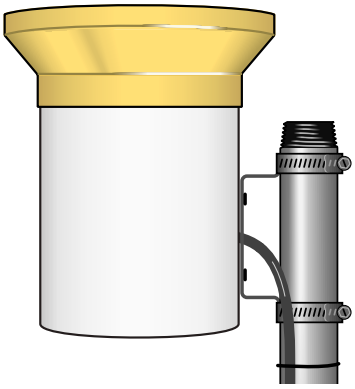
Tipping Bucket Weight
- **TE525WS:** 2.2 lbs. (1.0 kg)
- **TE525:** 2.0 lbs. (0.9 kg)
- **TE525MM:** 2.4 lbs. (1.1 kg)

Cable Weight: 0.2 lbs (0.1 kg) per 10-ft length

Accuracy
- **TE525WS:** ±1% (up to 1 inch/hr)
  +0, -2.5% (1 to 2 inch/hr)
  +0, -3.5% (2 to 3 inch/hr)
- **TE525:** ±1% (up to 1 inch/hr)
  +0, -3% (1 to 2 inch/hr)
  +0, -5% (2 to 3 inch/hr)
- **TE525MM:** ±1% (up to 10 mm/hr)
  +0, -3% (10 to 20 mm/hr)
  +0, -5% (20 to 30 mm/hr)



The TE525 is widely used in environmental monitoring applications.



The TE525MM measures rainfall in metric rather than US units.

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