

Tipping Bucket Rain Gage

Model CS700

The CS700 rain gage is manufactured by Hydrological Services Pty. Ltd.'s (Model TB-3). Rain funnels into a tipping bucket mechanism that tips when 0.01 inches (0.254 mm) of rain has been collected. Each tip is marked by a dual reed switch closure that is recorded by a Campbell Scientific datalogger pulse count channel. After measurement, the water empties through drains in the base of the gage.

The CS700's syphoning mechanism causes the rain to flow at a steady rate to the tipping bucket mechanism (regardless of rainfall intensity). Because of this, typical rain bucket errors become constant allowing the calibration process to minimize them. This produces accurate measurements for a range of 0 to 19.69" (500mm)/hr enabling the CS700 to record intense rainfall events.

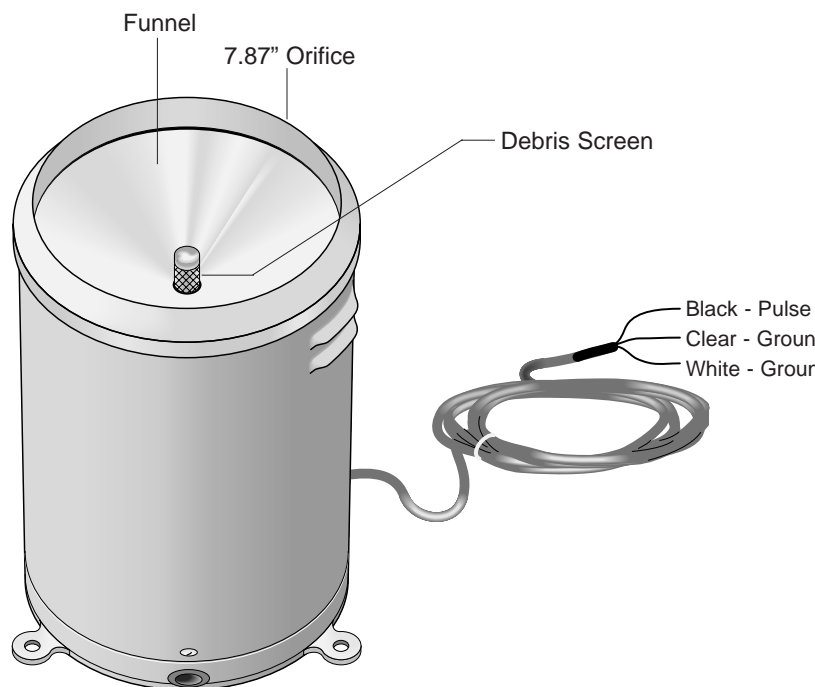
Options

As shipped, the base of the gage is supported by three legs. The CM100 Mounting/Leveling Base or a user-supplied baseplate with leveling capability is recommended. The CM100 requires a user-supplied concrete pad and a 1.25" diameter threaded pipe to mount the gage at the recommended 1 m measurement height.

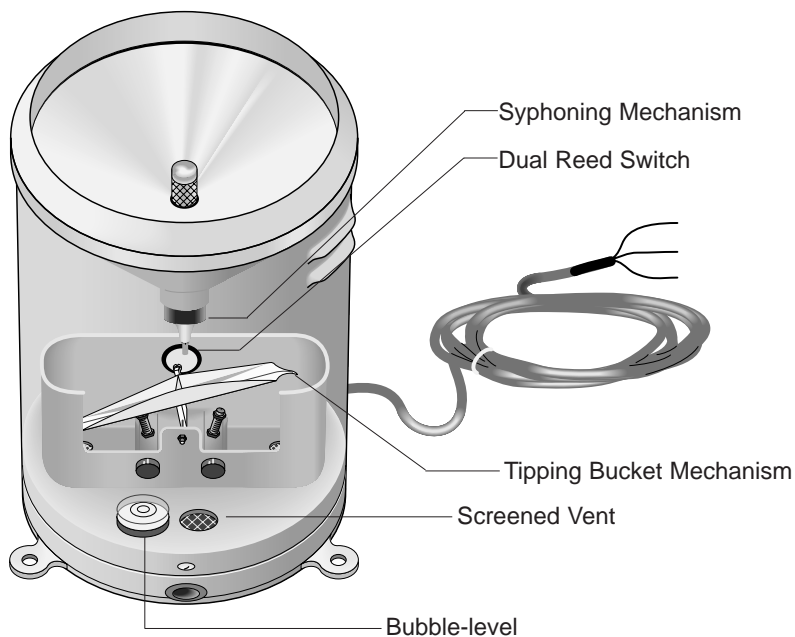
Ordering Information

CS700-L__ User specifies lead length (in feet) after the L.

For example, a CS700-L25 orders a CS700 with a 25' lead length.



CS700 as viewed from above



Transparent view shows tipping bucket mechanism



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Specifications

Sensor: Tipping bucket with syphon

Orifice Diameter: 7.87" (20 cm)

Accuracy: 2% @ 3.94" (100 mm)/hr rate

Resolution: 0.01" (0.254 mm)

Measurement Range: 0 to 19.69" (500 mm)/hr

Weight: 7.4 lbs (3.33kg) with 25 ft of signal cable (two-conductor shielded)

Height: 13.5" (34.2 cm)

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