



CS700-L

Rain Gage with 8 in. Orifice



Rugged, Accurate

Ideal for high-intensity
precipitation

Overview

The CS700, manufactured by HS Hyquest Solutions, is a high-end tipping bucket rain gage with an 8 in. orifice and a heavy-duty cast aluminum base. It measures precipitation in 0.01 in. increments. The CS700 is ideal for locations where intense

rainfall events may occur. This tipping bucket is compatible with all Campbell Scientific data loggers and is used in environmental monitoring applications.

Benefits and Features

- › More accurate measurement of high-intensity precipitation
- › Extra-heavy metal construction for durability and long life
- › High precision—tips at 0.01-in. increments
- › Compatible with most Campbell Scientific data loggers
- › Accuracy is ± 3 percent at high precipitation rates of 500 mm/hr

Detailed Description

The CS700 funnels precipitation into a bucket mechanism that tips when filled to its calibrated level. Each tip is marked by a dual reed switch closure that is recorded by a data logger pulse count channel. After measurement, the water drains through two orifices (accepts 12 mm tubing) in the base,

allowing the measured water to be collected in a separate container.

The CS700 contains an internal siphon mechanism that causes rain to flow at a steady rate to the tipping bucket mechanism (regardless of intensity). The siphon allows the sensor to make accurate measurements over a range of 0 to 50 cm per hour.

Specifications

Sensor Type	Tipping bucket with siphon and dual reed switch	› $\pm 3\%$ @ 250 to 500 mm/h (9.8 to 19.7 in./h)
Measurement Uncertainty	› $\pm 2\%$ @ < 250 mm/h (9.8 in./h)	

Measurement Uncertainty	700 mm/h (27.6 in./h) maximum rate per hour
Rainfall per Tip	0.254 mm (0.01 in.)
Measurement Range	0 to 700 mm/h (0 to 27.6 in./h)
Operating Temperature Range	0° to 70°C
Humidity Range	0 to 100%

Cable Type	Two-conductor shielded
Drain Tube Size	Both filters accept 12 mm (0.47 in.) ID tubing.
Orifice Diameter	20 cm (7.9 in.)
Height	34.2 cm (13.5 in.)
Weight	3.3 kg (7.4 lb) with 7.62-m (25-ft) cable

For comprehensive details, visit: www.campbellsci.com/cs700-l 



Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | www.campbellsci.com
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