





Rugged, Accurate

Ideal for high-intensity precipitation

## Overview

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

## **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

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

- Compatible with most Campbell Scientific dataloggers
- 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 datalogger 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  |
|-------------|---|
| Accuracy    | <ul> <li>±2% @ &lt; 250 mm/h (9.8 in./h)</li> <li>3% @ 250 to 500 mm/h (9.8 to 19.7 in./h)</li> </ul> |

| Resolution        | 0.254 mm (0.01 in.)             |
|-------------------|---------------------------------|
| Measurement Range | 0 to 700 mm/h (0 to 27.6 in./h) |

| Operating Temperature<br>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.)<br>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.au/cs700-I

