

## RAINFALL LOGGING SYSTEM

The Casella CEL Rainfall Logging System utilises the Tipping Bucket Rain Gauge with an in-built datalogger. The system enables rainfall data to be recorded and stored in the memory as real-time information.

Once measured, the rain water is automatically discharged from the rain gauge and therefore does not overflow when left for long periods of time. The rainfall data is transferred from the logger using a PC or laptop. PC software and a communication lead are provided with each system, enabling the user to produce daily and monthly tables and histograms.

An internal alkaline battery, having a typical life expectancy of up to 3 years, is used to power the system. A lithium battery provides protection of the logged data in the event of main battery failure or replacement. The datalogger is only active during actual rainfall and remains dormant during dry spells to conserve both memory and main battery reserves. During rainfall periods, data will be recorded with a time resolution of one minute and presented as total rainfall occurring within the given minute.

For example if the logger of a 0.2mm model logs 3 tips in 1 minute, it will show a result of 0.6mm rainfall for that minute. The memory has the capacity for almost 100 hours of continuous rainfall.

## Applicable Standards

BS 7843 Guide to acquisition and management of MET precipitation data recorders parts 1 and 2

WMO commission for instruments and methods of observation No. 727



## INTEGRAL APPLICATION SOFTWARE

Casella CEL Integral application software provides users of Casella CEL rainfall logging systems with a powerful and versatile Windows program for the accumulation, processing and presentation of rainfall data. It can also import data from Casella's current RLS application (which it replaces).

Once data has been downloaded from a logger it provides a large number of ways to view / interrogate the data.

The Rainfall Logging System application allows you to view rainfall data in three

different tabular formats, and three different graphical formats. All of which can be printed or copied into a word processor package to produce reports. It can also calculate rainfall totals and the maximum hourly rainfall rate.

### Main data views:

- Summary
- Minute table
- 15 Minute table
- Hour table
- Day table

- Daily hour histogram
- Month day histogram
- Month hourly rain graph



Specification	TIPPING BUCKET	
Bucket sizes	0.1, 0.2 or 0.5mm	
Aperture	400cm <sup>2</sup>	
Accuracy	±1% @ 1 litre/hr	
Weight	2.6kg	
Specification	INTERGAL LOGGER	
Clock accuracy	±1 minute per month	
Power	Battery operated 1 x PP3 (back up power for memory and clock - lithium PCB cell)	
Serial interface	RS232	
Internal memory capacity	32K RAM	
Dimensions	140 x 100 x 35mm	
Ordering Information		
Rainfall Logging System with software and communications cable		
0.1mm (light rainfall)	103553D	
0.2mm (moderate rainfall)	103552D	
0.5mm (heavy rainfall)	103554D	
Contact Details		
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