

Casella Rainfall Logging System

Introduction

The Rainfall Logging System (RLS) from Casella provides a robust, reliable stand-alone method for monitoring rainfall. It can be supplied complete with the Casella low, medium or high rainfall tipping bucket rain gauges or as a separate data logger unit for use with other measurement systems.

A comprehensive MS Windows™ software package allows tabular and graphical analysis of the rainfall data plus export to other programs when downloaded to a computer or to a PDA.



RLS with pc download

Applications

- Hydrology investigations
- General rainfall monitoring
- Rainfall distribution & intensity
- Remote monitoring
- Leachate/run off monitoring
- Ecological studies
- Agricultural studies
- Climate change studies



RLS with PDA download

Ordering information

103801D
103800D
103802D
103803C

Rainfall logging system with low range tipping bucket 0.1 mm/tip
Rainfall logging system with medium range tipping bucket 0.2 mm/tip
Rainfall logging system with high range tipping bucket 0.5 mm/tip
Data logger only

Key benefits

- Very low maintenance
- Choice of 3 systems for low, medium or high rainfalls
- Large 64 kb data logging memory stores over 13,000 data points
- Download to either personal computer or to PDA device
- Logger available as a separate unit for integration into other systems
- Long battery life over 5 years
- Indicators for logger status and low battery warning

Software

Rainfall is Casella's pc based software solution for the rainfall logging system. It provides users with a powerful and versatile Windows based solution for the accumulation, processing and presentation of rainfall data. The software is backwards compatible with existing Casella Rainfall logging systems.

Rainfall gauges can be configured and downloaded via the PC or PDA route. Remote access of on-site systems can also take place via external GSM enabled modems as a future option.

Technical specifications	
Physical specification -	
Logger dimensions	5.4 x 4.0 x 2.1 in (138 x 103 x 54 mm)
Input channel	Volt free contact closure
Output channel	Intensity corrected pulsed output (open collector)*
Alarms	GMS/SMS for rainfall event or intensity*
Data logger -	
Memory size	64 Kbytes non-volatile with backup protection
Recorded data	Event, date & time for >13,000 rainfall records
Logging resolution	Total tips per minute Total intensity per second* (Zero rainfall is not recorded)
Power source	4 x AAA alkaline batteries battery life typically > 5 years
Backup power source	1 x CR2032 button cell battery life typically > 10 years
Communication -	
	By RS232 using supplied cable (optionally to USB port with adapter)
Operating temperature range	22 to 120 deg F (-10 to 50 deg C)
Operating humidity range	0 to 100 % RH non condensing
Tipping bucket rain gauge accuracy	+/- 1% at calibration flow rate (all units supplied with initial factory calibration certificate)
Applicable standards	BS 7843-3.2:2005
Kit includes	Tipping bucket (low, med or high), Logger, RS232 cable and Microsoft Windows™ software (NT, XP, 2000) (software package optional for Pocket PC operating system)
Other options planned -	
	Integral rainfall intensity correction
	Remote solar power for GSM module
	Remote data collection via GSM
	SMS alarm on cell phone for event in progress or intensity

