

Version: 1.0

Title – Casella Rain Gauge

Made By: TB (Issue 1)

How to configure Casella Rain Gauge

This FAQ sheet details the configuration and setup procedure for a Casella Rain Gauge, and outlines the hardware testing, the hardware configuration, and the firmware configuration. The following components are needed:

- Casella rain gauge
- Casella rain gauge bucket
- cable adapter
- HWM Intelligens
- CABA9420 cable
- CABA9420 test cable for Intelligens (GasLog)
- IDT (version 2.03.32 and above)

There is a three stage setup required for the system to operate:

- 1. Testing the hardware.
- 2. Setup the hardware.
- 3. Setup the IDT.

Testing the Hardware

- 1. Plug the CABA9420 test cable into the Intelligens and a computer.
- 2. Connect a pair of banana plugs to the platform.



- 3. Connect the black plug on the platform to the green plug on the test cable, and the red plug to the blue plug labelled with number 1.
- 4. Connect the test cable to an Intelligens, and connect the Intelligens to the computer.

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- 5. Open the IDT, and click "Read Device".
- 6. Go to "Hardware Tests", and press "Start Test".

	-

IDT (Basic mode) V2.03	.32	_		\times		
File Tools Options	Help			+		
Setup Hardware Tests	ata Collection	Secondary F	iles			
				^		
18.70 °C	Int /	/Ext Temperat	ture			
7.00V	Batt	tery Voltage				
0000.0 0009 0%	Flov	Flow 1				
0000.0 0000 0%	Flov	Flow 2				
Fault	Son	Sonic Read				
0040.00	Flov	v Open Chann	el			
Start Test Po	wer Window	Mode	m			
Force Call Do	wnload call history	SS Con	fig			
Delayed Call La	ast Call Stat					

8. On the platform, change the position of the gauge repeatedly. The numbers in the third box should change on the IDT.



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Setting up the Hardware

1. Assemble the cable adapter as shown below. The CABA9420 cable should pass through without problems. The cable should pass from the 'spring' end towards the hexagonal nut end.

Always use HWM connection cable CABA9420-Y (Y indicates cable length)





2. Connect the blue and green wires only. Excess wires can be cut off.





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- 3. Screw the 'spring' into the adapter until it is tight. This will keep the cable from slipping.
- 4. The final setup should look like below.



Configuring the Firmware

- 1. Start the IDT, and click "Read Device".
- 2. If different, change the Logging Parameters and Logging Channels to match those shown below.

Start logging imm	ediately	~
Last Restart Time	e 28 Jul 2016 🔲 🛪	09:30 00 🌲
Last Stop Time	01 Jan 1970 🔲 🛛	00:00
Log data at spec	ified time interval $$	01:00 00 🜲
Sample Interval Transient / Secor	ndary logging	00:02 00 🚖
Transient / Secor		00:02 00 🕞
Logging Channel	Mode O	



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3. Click Setup Device.

	UTC Time ~	
	Setup Device]
	Stop Device	
		-
Device	Read Device	

4. If any unsent data are detected, a message box will pop up and prompt the user. Any unsent data recorded may be discarded or downloaded. **Warning**: configuring the device will permanently erase any recorded data.

ll mode	Call in when event occurs	\sim	
iore W	arning	٦	
Tri <u>c</u> Tri <u>c</u>	Unsent data detected This operation will erase data Continue now?		
er F	Yes No		+
e(s) Da	ta Is Sent		

5. If "Call Out" settings are disabled, the user will be prompted with a message box. This can be configured later.

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	REDECORES REDECORES Full Conservation Systems	Made By: TB (Issue 1)	
	Call mode Call	in when event occurs \sim	
	Igr Warning	settings set. Continue now?	
	Me	Yes No ·	
	Time(s) Data Is Sent		

6. The loading bar will load a few times, before the confirmation message box appears.

	data at s	pecifie	d time ir	nterval 🗸	01:0	0 00	•
amj	ple					×	
iran	sie 🜔		evice S	Setup Suc	cess		+
.og	gir				ОК		
1	Flow1 L	lni 🗸	Ave	~	[1		
		×					

Setting up the channel in Datagate

1. Open your Datagate account and find the Rainfall logger and select the Channels Tab -

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				tle – Casella	a Rain G	auge				
			Luid Conservation Systems	ade By: TB (Is	sue 1)					
HWM	Data	Gate							Current user: hwm Access level: Supe Logout: logo	er admin
Loggers	View log	gger								
Loggers Summary All Loggers	Datag	erial number 0000016 gate number 28583 obile number 447568124	4750	Longit	ude 51.536329 ude -3.587497 AOD 99.0				Edit logger	ŕ
Quiet loggers My Loggers Lost loggers Upload loggers Create a new logger Send to loggers Logger Types Logger types New logger type		data number 075681250 Site name Sam Rainfa Site id Sam Rain Date created 26-Feb-20 Network 02 Type COMLog Owned by AndyEarp	all - UL	End c Battery condi Signal strer Ver T		8 23:59			Edit logger cha	nnels
Channel units Channel units New channel unit	Credits	Channels Account	ats Alarm response	s Incoming data I	incoming text	Outgoing messa	ages			
Accounts	Channels									
My Account My Account Change my password	Number	Flow pulse factor	Meter read value	Meter read date	Analog low	Analog high	Name	Offset	Measurement	Dele
All accounts	1	0.2		2013-02-26 00:00:00					Rainfall (mm)	Î
All accounts Create new account	2	0.1		2013-02-26 00:00:00			DIAG		Other	盲
Logs	3	0.2		2013-02-26 00:00:00				0.0	Rainfall (mm)	盲
Messaging logs	4	10.0		2013-02-26 00:00:00			(hide)		Rainfall (mm)	Î
Incoming SMS Incoming GPRS										

2. If no channels are showing select the Add New Channel button -



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HWM	DataGate	
Loggers	Edit logger channe	els
Loggers Summary	Channel 1	
All Loggers Quiet loggers	Number	1
My Loggers Lost loggers	Name	
Upload loggers Create a new logger	Offset	
Send to loggers	Channel type	Rainfall (mm) 🗸
Logger Types Logger types New logger type	Calibration Multiplier	0.2
Channel units	Meter read value	
Channel units New channel unit	Meter read date	26 v 2 v 2013 v 0 v 0 v
Accounts	Analogue low value	
My Account My Account Change my password	Analogue high value	

- Select Channel Type as Rainfall in the appropriate units. Apply calibration multiplier – this is the rainfall per tip of the bucket – in the above example it is 0.2mm of rainfall per tip of the bucket.
- 4. Select 'Update logger channels' to save this so the data coming into Datagate will be correctly scaled.

Viewing on HWM Online

Open your HWM Online account and you should see the graphical representation of the data from the Rainfall logger as follows –



Site		Period:		Rain. Units:	Interval:
Sarn Rainfall - UL	~	Last Month	~	Auto 💙	Auto 👻
9	2			Flow Interval:	Show:
Floot Summary Elect Man Alarma				Usage 🗸 🗸	Main Recording
Fleet Summary Fleet Map Alarms	~			Usage 💌	Main Recording
					Show Graph

Sarn Rainfall - UL Phone: 447568124750 Site ID: Sarn Rain From: 08Aug2016 12:00 To: 05Sep2016 12:00 (30 Mins)



Data Statistics

Document History:

Edition	Date of Issue	Modification	Notes
1st	28/07/16	Release	