Sensor Accessories

The Rain Gauge

(Product No. 3298)





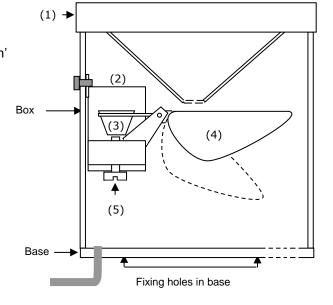
Data Harvest Group Ltd. 1 Eden Court, Leighton Buzzard, Beds, LU7 4FY Tel: 01525 373666 Fax: 01525 851638 e-mail: sales@data-harvest.co.uk www.data-harvest.co.uk



© Data Harvest. Freely photocopiable for use within the purchasers establishment

Rain Gauge information

- (1) Funnel with grill
- (2) ON/OFF switch
- (3) Magnet
- (4) Self-emptying measuring 'spoon'
- (5) Adjustment screw



The Rain gauge registers rainfall by rain water landing in the funnel-shaped top (1), which leads the water down into a self-emptying spoon (4).

The spoon is balanced on a pivot and held by a magnet that is in contact with a switch. The magnet exerts just enough tension so it will release its hold when the spoon is full - causing the spoon to tip, empty and return to its normal collecting position in one quick movement. When the spoon tips it triggers the switch from normally closed (ON) to open (OFF).

The spoon automatically tips and empties each time the spoon registers 5 g of water (the equivalent of **1 mm** of rain has fallen). Total rainfall is measured by counting how many times the spoon tips.

The Rain gauge is made of STYROSUN which is a very endurable and weatherproof material resisting the sun's UV radiation and extreme frost and heat temperatures.

The Rain gauge consists of 3 parts, funnel, box and base plate, which can be taken apart and assembled again without the use of tools.

- 1. Funnel with grill
- 2. Box with self-empting spoon
- 3. Base for mounting on a fence or post or some other suitable position

Connecting

- Connect the jack lead from the Rain gauge to the jack socket on the side of the *Smart* Q Count/Tachometer adapter and then connect the Adapter to the logger.
- Select the range of the Count/Tachometer adapter as Rain gauge (mm).
- The LED will light when a count is detected.

The lead

The Rain gauge comes with a 10 m lead ending with a 3.5 mm jack plug, which is used to connect to the Count/Tachometer adapter. The lead maybe lengthened by using 3.5 mm male/female jack extension cable.

Mounting instructions:

• Remove the base from the box.

0%

+ 5%

- 5%

- Place the base horizontally and fix it to a fence, post or similar using 2 screws through the two holes provided in the base.
- Press the box back into place over the base making sure the lead fits into the notch in the base provided for it.
- If the funnel has been removed from the box, fit it back into place using gentle pressure.

Getting the most accurate results:

- Position on a flat surface if the surface isn't flat, the bucket may not tip at the calibrated level so the calculated rainfall will not be correct.
- Position on a surface that does not vibrate or move.
- Dirt and debris falling in the funnel may block the grill so don't place too close to a tree.
- Inaccurate readings maybe caused by the amount of rain collected being dependant on wind direction.
- Don't locate near any magnetic, steel, or iron objects which may affect the anchoring effect of the magnet.

Adjustment:

RAIN-O-MATIC has been carefully adjusted at the factory, but further adjustment can be made in the following way:

- Carefully lift the funnel and box clear of the base plate and tip on its side.
- Locate the adjustment screw, visible under the measuring spoon.
- On the inside of the base plate is a diagram showing the effect of turning the adjustment screw, clockwise is positive, anticlockwise is negative.

To check your adjustment:

- Measure exactly 500 cm³ of water. Drip the water very slowly through the funnel this should take at least 15 minutes. If the rain gauge is correctly adjusted the Count/Tachometer should read 100 mm.
- If the display does not show 100 mm make further adjustments by repeating the process described above until it does.

Limited warranty

For information about the terms of the product warranty, see the Data Harvest website at: https://data-harvest.co.uk/warranty.

The right of alteration of this product without notice due to technical developments is reserved.



WEEE (Waste Electrical and Electronic Equipment) Legislation

Data Harvest Group Ltd are fully compliant with WEEE legislation and are pleased to provide a disposal service for any of our products when their life expires. Simply return them to us clearly identified as 'life expired' and we will dispose of them for you.