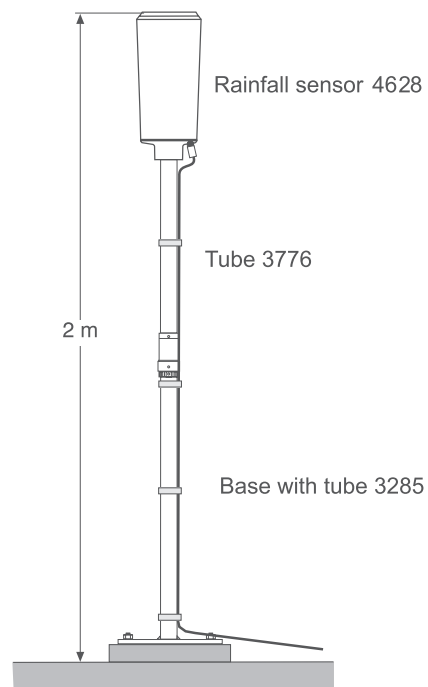




RAINFALL SENSOR 4628 (With heating 4628H)

A Tipping Bucket Rain-O-Matic® precipitation sensor adapted for use with Aanderaa Field Monitoring Equipment



Monitoring rainfall is of great interest to meteorologists and climatologists as well as to the general public. The tipping bucket type Rainfall Sensor 4628 is designed to measure this important parameter with great accuracy and reliability.

It is a lightweight, frost proof, heat-resistant and rugged sensor specially adapted for use with the Aanderaa Automatic Weather Station 2700. The sensor has passed the so called Arizona test and can be used under almost any climatological condition. The sensor housing is made of outdoor polystyrene called STYROSUN.

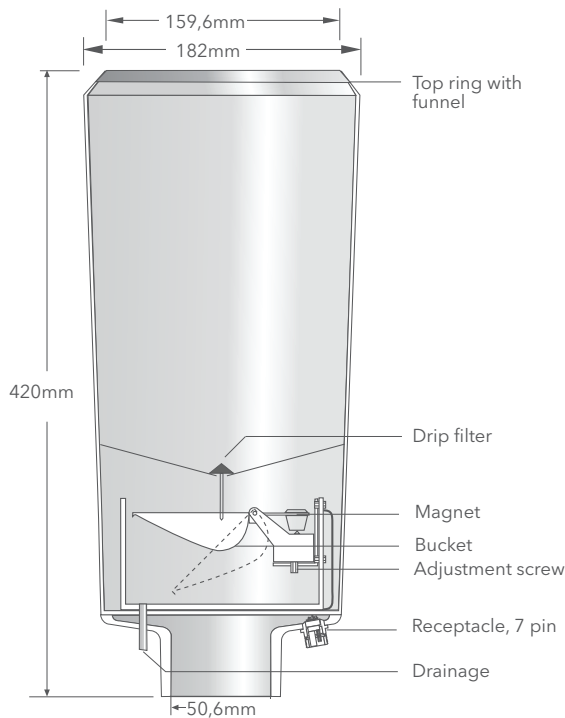
The collecting funnel has an orifice area of 200cm². Rainfall is collected in the funnel and led into a tipping bucket that gives one count for each tipping. Each tipping signifies 0.2mm rainfall.

The sensor should be mounted on a 50mm vertical tube. A 1m high Tube with Base Plate, part no. 3285, and an Extension Tube, part no. 3776, is available. Using these two items will place the sensor 2m above the ground.

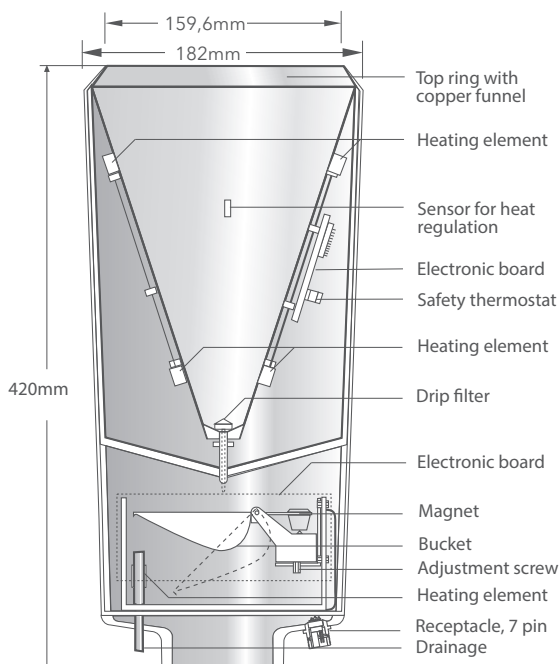
Cable 5321 connects the sensor to the datalogger. This cable is available in different lengths. Base Plate 3285 and one Extension Tube 3776 as well as a 10m Cable 5321 are included in the rainfall sensor kit.

A version with heating is designated 4628H. This sensor is delivered with a separate power supply module 100-230VAC/ 24VDC and a Power Cable 3766, the power requirement is maximum 50W. This module is placed between the SmartGuard and the sensor. A 10m Power Cable 3766 is included in the rainfall sensor kit with heating.

Specifications 4628/4628H



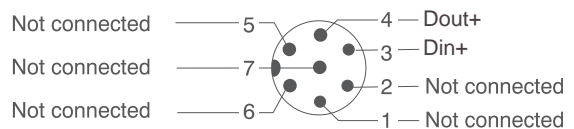
Rainfall Sensor 4628



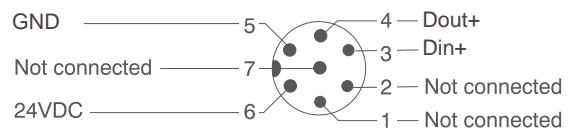
Rainfall Sensor 4628H with heating

- Resolution: 0.2mm
- Accuracy: ±2%
- Range: maximum 200mm per sampling interval - 12mm per minute
- Orifice area: 200cm²
- Output Signal: Digital
- Current Consumption: 30µA, (4628)
Heating Power: Max. 50W (4628H)
- Electrical Connection: EcoMate, 9-pin D-sub
- Operating Temperature: 0 to +60°C (3864)
-30 to +60°C (3864H)
- Material: STYROSUN/ Al
- Net Weight: 4628: 1,3kg, 4628H: 2,1kg
- Gross Weight: 4628: 1,5kg, 4628H: 2,5kg
- Packing: Cardboard box
- Accessories: included: Power Supply.220VAC/24VDC for 4628H with DC and AC cables, 10m each. Other lengths on request at additional cost.
- optional: Tube with Base Plate 3285, 1m
Extension Section 3776

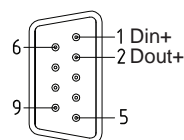
PIN CONFIGURATION, 4628



PIN CONFIGURATION, 4628H



PIN CONFIGURATION, 9-pin D-sub



CALIBRATION, Sensor Type **Serial No:**
The sensor calibration is performed with the sensor connected to SmartGuard. The general formula for converting the raw data reading, measured by the SmartGuard, to engineering units is:
 $Rainfall (mm) = A + BN + CN^2 + DN^3$
where N is raw data reading, and A, B, C and D are the calibration coefficients. The coefficients are fixed and the same for all Rainfall Sensors 4628 and 4628H.

A	0	C	0
B	2.000E-01	D	0



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