

Siting your weather station to obtain the rainfall data you want!

The Problem

You have purchased a weather station through us that allows you to measure temperature, humidity, rainfall, wind speed and barometric pressure. You are most interested in rainfall data as you use the station to gauge how much rain has fallen in your garden; however you are unsure as to where to mount the station in order to obtain the most accurate results.

The Solution

It will depend on the station that you have purchased as to which setup will best suit. If you have a station such as the [IC0369](#) or [IC6250AU](#) where all the outdoor sensors are combined in the one sensor suite or the [IC0346](#) or [IC0348](#) where there are only short cables connecting the sensors to the transmitter then the station is best suited to being mounted 1.2-2m off the ground in the area where you wish to establish the rainfall level.

If you have a station such as the [WS1516IT](#), [WS2355](#), [IC6152AU](#) or any of the Vantage Pro 2 range that has the capability to have the anemometer (wind sensor) separated from the rest of the sensors then you have more flexibility with regards to mounting the station. If you have one of these stations we would advise setting up the rain gauge, along with the temperature and humidity sensors approximately 1.2-2m off the ground near the site you wish to establish rainfall. The anemometer can then be mounted at a higher position if desired to improve your wind speed data. The optimum height is 10m, however this is not achievable in most instances and as such mounting it on your roof above the roof line will yield the best results.

The reason for mounting the rain gauges at this level is to reduce the effects that higher wind speeds can have on the measurements obtained. This is due to the fact wind speeds at higher levels are significantly higher and can affect your rainfall readings. This is because wind eddies can form around the orifices and this reduces the catch of small rain drops. This problem is known as wind-induced gauge under-catch and is considered the most common and serious source of rainfall-measurement errors.

Through mounting your station at these levels you will establish rainfall levels that closely correspond to the levels falling on your garden or lawn. It is also the ideal height to mount the gauge in order to most closely match the rain that has occurred in your area.

If you need any assistance with selecting a weather station or setting up your station please contact one of our friendly Scientists via [email](#) or phone on 1300 737 871.

Recommended Products

All in one sensor suites/short cabling

Vantage Vue Wireless Weather Station - IC6250AU



The Davis Vantage Vue Wireless weather station is a durable, accurate and compact option for weather enthusiasts. It measures and tracks 10 different weather variables at the same time.

Professional Wireless Weather Station with 7" Colour LCD and Solar Powered Sensors - IC0369



A professional grade weather station coupled with a 7" colour LCD that will measure almost anything planet earth can throw at it. It's capable of displaying temperature, wind speed, wind direction, wind chill, barometric pressure, and dew point. You can see how much rain has fallen in 1 hour, a day, a week, or a month, see the current UV index reading, and even see the current lux measurement outdoors which is great for those who have rooftop solar arrays. Install the sensors outside and the readings will be transmitted wirelessly to the base unit up to 100m away.

Wireless Weather Station with Rain Gauge and Forecasting - IC0346



The Wireless Weather Station with Rain Gauge and Forecasting is the ideal item for weather enthusiasts and budding meteorologists. This reliable and accurate station can track up to 10 different weather parameters at the same time.

Wireless Weather Station with Touch Screen - IC0348



This easy to install touch screen weather station provides users with instant access to the current temperature, both inside their home and outside, along with the wind speed, wind direction, wind chill, dew point and a rain fall. The unit also measures barometric pressure in order to provide an accurate weather forecast.

Ability to mount anemometer separately to rain gauge

LaCrosse Professional Weather Station - WS1516IT



LaCrosse Pro Weather Station - WS2355



The La Crosse Pro Station provides weather enthusiasts with a highly accurate weather station. The station includes a base and three outside sensors to improve its performance, including a wind sensor, a rain sensor and a thermo/hygro transmitter.

Davis Vantage Pro 2 with standard Radiation Shield - IC6152AU



The Davis Wireless Vantage Pro2 weather station enables weather enthusiasts to track current and historical weather data. Unit can be mounted, and the sensor suite uses solar power.