

Weather Station Installation Manual

Congratulations with your purchase, thank you for choosing Quantified!

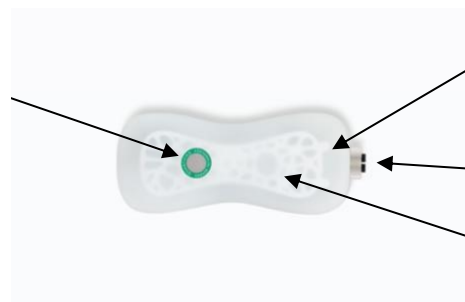


1 Gateway installation

First install the gateway, please refer to the applicable installation guide. In case you use the KPNLora network (The Netherlands only) please proceed to the next step.

2 Installing the FireFly sensor (first install the Gateway!)

Membrane for air access to the T, P and rH sensors
FRAGILE! DO NOT PRESS NOR REMOVE !



Reset spot for magnetic reset pin

Connector for charger and external sensor devices

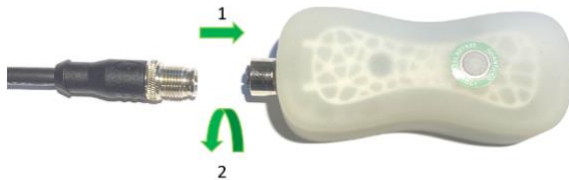
LED light Green / Red



Figure 6. Firefly sensor (sensor configuration as an example, your configuration may differ)

The FireFly sensor node is shipped in “safe mode” to preserve battery life and prevent transmission during airfreight. First charge the battery to 100% (red indicator lamp on the charger when charging). Reset the FireFly by swiping the Quantified reset magnet over the indicated spot just above the connector. The LED-indicator will flash red, when the LED flashes green the FireFly is online. Ensure that the connector is always shielded with an end cap to prevent corrosion and internal damage.

3 Connecting the weather station to the FireFly sensor



The weather station uses the transmission module and battery power from the FireFly platform sensor. The connector only fits in one position. Carefully rotate the connector to click it into place. Then screw the chrome ring tight (firmly but only by hand), this is important to keep any moisture out! When the external sensor is connected, activate the combination by using the magnetic reset pin. As of now any additional magnetic reset will result in a reset of the pluviometer counter.

4 Placing the mounting pole

When placing the mounting pole, care should be taken to place the windmeter at least 1 meter over the highest nearby obstacle. Make sure the pole is installed vertically. Depending on the configuration, from the top of the pole to the bottom the sensors should be placed in this order:

- Wind meter (For correct wind direction readings, the horizontal arm should point to the North)
- Pluviometer (if temperature and humidity is not needed, FireFly is mounted on the stainless-steel bracket)
- Mounting block and Macro Solar Chimney (for temperature and humidity measurements the FireFly needs to be mounted in the Macro Solar Chimney)

5 Weather station components

First install the mounting pole vertically (deviations will affect the measurements), then attach the components.

Windmeter

Assemble the windmeter using the instructions in the box. The horizontal arm should point to the North for correct wind direction readings. Make sure access wire is fixed to the pole to prevent movement of the wire or that it might obstruct the pluviometer.

Pluviometer

Place the bird spikes and place the anti-leaf grid on the brackets. Make sure that the windmeter nor any other obstructions are placed over the pluviometer funnel. For optimal results, clean the inside and outside of the pluviometer periodically to prevent blockages and or decrease of the spoon volume due to sediments.



Mounting block with solar panel

The mounting block is mounted to the pole using two tie wraps. The connector cables should come from the bottom with the solar panel facing slightly upward. Make sure the solar panel is facing the sun at midday and nothing is obstructing sunlight to hit the solar panel.

Macro Solar Chimney

The Macro Solar Chimney should be attached to the mounting block using two tie wraps. Make sure there are no air flow obstructions within 25cm of the top or bottom of the chimney. Hang the FireFly (using the stainless-steel hanging clip) on the bar inside the Macro Solar Chimney.