Weather Station Installation Guide
Congratulations with your purchase, thank you for choosing Quantified!

This is a quick guide to getting started, for more extensive descriptions and specifications, please go to
https://www.quantified.eu/our-products for our full manuals.

1   Gateway installation

First install the gateway, please refer to the applicable installation guide. In case you use KPNLora 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 REMOVE !

Light window for radiation sensor (lux / PAR)
DO NOT BLOCK or smudge window !

Reset spot for magnetic reset pin

Connector for charger and external sensor devices
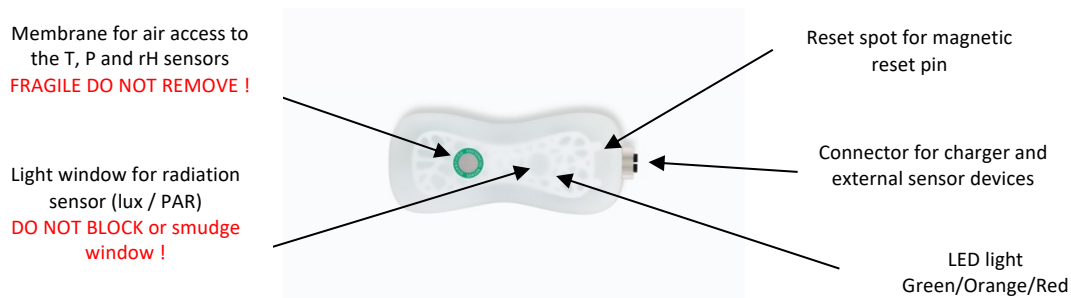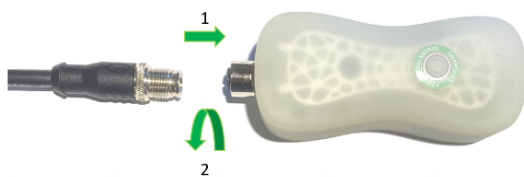
LED light
Green/Orange/Red

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

The Firefly sensor nodes are 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 will turn green when full).

Reset the Firefly by swiping the Quantified reset magnet over the indicated spot just above the connector. The LED-indicator will flash a red – orange – green sequence, once you see a single green LED-flash, Firefly is online! Ensure that the M12 connector is always shielded with a cap to prevent corrosion and internal damage. A reset will result in a tare / "set to zero" for external sensors.

3   Connecting external sensor devices to the FireFly sensor

External sensor devices use 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 (firm 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. This reset also resets counters in sensors like the scale, pluviometer and drainsensor.

As of now any additional magnetic reset will result in a reset of counters or taring for scales in for instance: (FireFly, all types of scales, pluviometers, and any other sensor with a cumulative counter).

4   Placing mounting pole

When placing the mounting pole, care should be taken to have at least 1 meter of free space for the windmeter over the highest nearby point. Make sure the pole is installed in a vertical line. Depending the configuration, from the top op the pole to the bottom the sensors should be placed in this order:

- Wind meter (For correct wind direction readings, the horizontal stick should point to the North)
- Pluvio meter
- Solar chimney (For correct PAR readings, the Firefly should point to the South, free from any shade)
- Posseidon WET-sensor (see the Poseidon installation instruction for the correct moisture measurements)

5 Weather station components

First install the mounting pole, then attach the components.

5.1 Windmeter

The horizontal stick should point to the North for correct wind direction readings.

The windmeter is cable connected to the pluviometer. Do not put strain or tension on the cable during or after installation! Make sure the cable does not obstruct other measurements.

5.2 Pluviometer

Make sure that the windmeter nor any other obstructions are placed over the pluviometer. The windmeter points in Northerly direction, pulvio preferably in the opposite direction. For optimal results, clean the inside and outside of the pluvio meter onze per 6 months to prevent blockages and or decrease of the spoon volume due to sediments.

5.3 Solar Chimney

In case the Firefly is also used for PAR readings, it should face South, free from light obstructions / shade)
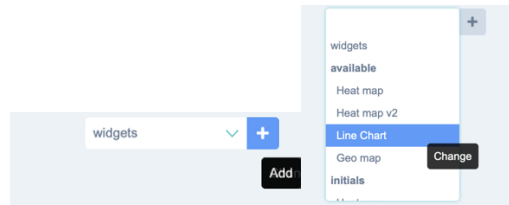
The Solar Chimney can be attached to the pole with the use of the black block end 4 tie wraps. Make sure there are no air flow obstructions within 25cm of the top or bottom of the chimney.
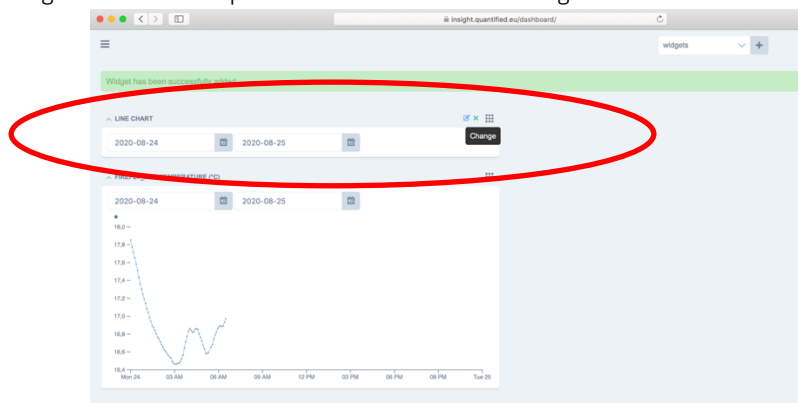
6 Connecting to "Insight"

To get all the functionalities working the use of either Google Chrome or Firefox is needed. WARNING: Insight will not work correctly using other browsers like Internet Explorer or Safari. Go to www.quantified.eu and use the "Log in" button in the right top corner of the website to connect to Insight.
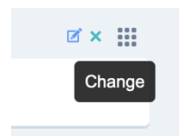
6.1 Dashboard screen and managing Widgets

After logging in you will find yourself on the dashboard page which you can customize according to your needs with multiple widgets. To Add a Widget select a Widget type from the dropdown and click on +.
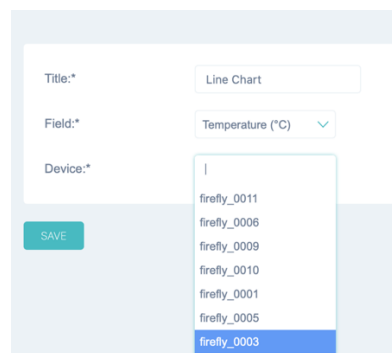

This will add a Widget on the desktop. You can now define the Widget characteristics.

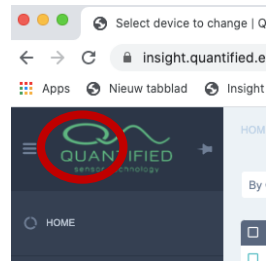To define a Widget, select the change Widget Icon on the top right of the Widget.

Select the device from the list and choose the Field type. Next click on the SAVE button.

You can **re-position the widget** by clicking and dragging the Widget on its ⠿ Icon.

6.2 Device screen

By clicking on the hamburger symbol in the top left of your screen, you can open the menu screen where you will find the Devices Menu item. You can toggle the menu by clicking on the hamburger symbol.

Clicking on the Devices menu will show a screen with all available devices. From this screen you can download device data or see the data of each individual device by clicking on the device name.

6.3 Downloads

Clicking on the Download device data button will show a pop-up where you can enter data range and export type of data. After clicking Download the data will collected from the server and can be opened in Excel by clicking on the excel link in your browser. **ATTENTION: The download size is limited as indicated in the download screen.**