

# Guide to using Insight Congratulations on your purchase, thank you for choosing Quantified!

Please note that Quantified can only guarantee full end-to-end functionality if all components in the network are provided by us. Using third-party data platforms to view your data based on our API link is not an impediment.

Connecting to the Quantified data platform "Insight"

When you placed your order, you received your login and password to log in to the Insight platform. Please use Google Chrome (PLEASE NOTE: Chrome's translation feature must be off) or Firefox to connect to Insight. WARNING: Insight does not work correctly with other browsers such as Internet Explorer or Safari.

For data flow and storage, we use Amazon Webservices. Your data is handled with the utmost care and we meet the highest standards. You can find the AWS Privacy Statement here: <u>https://aws.amazon.com/compliance/data-privacy-faq/</u>

Go to www.quantified.eu <u>http://www.qauntified.eu/en</u> use the "Login" button in the upper right corner of the website to connect to Insight and access your information. We recommend that you change the password you received from Quantified.



After you click the Login link, you will be prompted to enter your username and password.



We recommend changing the password you received from Quantified. At the top right of the screen, you will see the "Change password" option.

widgets	$\sim$	+	Paul	^
			Change password Log out	

#### Dashboard view

After logging in, you will be taken to the dashboard page. On the dashboard page, graphs for "favorite" sensors can be added via "widgets". At the top of the screen, different types of graphs can be selected using the "widgets" button and then added using the "+". With drag and drop, graphs can be arranged in two columns.



🗧 🔍 🗠 Home   Quantified 🛛 🗙 🚱 Q	luantified   Quantified X	+				
$\leftarrow \  \   \rightarrow \  \   {\Bbb C}  \  \   (\texttt{a} \  \   \texttt{insight.quantified.eu/dashboard/}$					\$	• • •
=		C	widgets	~ +	Username	~
+ widgets	HOME > LINE CHART					
available Heat map	Title:*	Line Chart				
Line Chart Geo map Device group	Generate title Generate title base on fiel	ld and device name. Will override				
initials	Field:*	Temperature (*C)				
	Device:*	Air Pressure (Pa) Mass (kg)				
	SAVE	Mass (g) Relative Humidity (%)				
		Battery Voltage (V) PAR (µmol/(m²s))				

### Managing widgets

The "Line Chart" widget shows the values of a sensor field of the selected sensor over the selected period. The "Device group" allows the data of the same parameter from different sensors to be placed in one chart.

To define a widget, select "change" in the upper right corner of the widget. To remove the widget, use the "cross".



If the change widget icon is not visible, hover over the icon first. 🏥 Select the desired sensor from

the "Device" list and the desired parameter from the "Field" list.

When "Generate title" is checked, Insight will use the sensor label name in the chart name. It is also possible to enter your own title in the "Title" field. Then click the "SAVE" button.

Title:*	Line Chart	
Generate title		
	n field and device name. Will oven	
Field:*	Temperature (°C)	$\sim$
Device:*		~

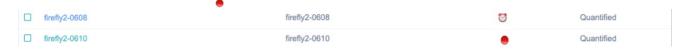
The result is automatically saved to the dashboard. You can reposition the widget by clicking and dragging the iii icon.



"Devices" display Clicking on the hamburger icon at the top left of your screen reveals a menu structure including the "Devices" selection.



Clicking on the "Devices" menu displays a screen with all the registered sensors on your account. From this screen, you can view sensor data for each individual sensor by clicking on the sensor name. In the alerts column, icons indicate respectively that the sensor has not been online for a week, and that the battery needs to be charged .



## Downloading sensor data

The "DOWNLOAD DEVICE DATA" button at the top right of the screen allows sensor data to be downloaded. CAUTION: select the desired sensors by checking the box! Maximum amount of data can be downloaded at a time (a system specified).

DOWNLOAD DEVICE DATA
DOWNLOAD DEVICE DATA
Data exports

The download is happening in the background and will become available through a link in the left part of the screen under: "Data exports."

	AVAILABLE UNTIL	STATUS	DOWNLOAD LINK
Nov. 25, 2024, 7:15 a.m.	Dec. 2, 2024, 7:15 a.m.	In Progress	

Under "DOWNLOAD LINK" a link will become available when the system is ready, refresh the browser to see if the link is ready. Clicking on the link will display the download in Excel.

CREATED AT	AVAILABLE UNTIL	STATUS	DOWNLOAD LINK
Nov. 25, 2024, 7:15 a.m.	Dec. 2, 2024, 7:15 a.m.	Ready for download	32b957dd-c215-4f4e-80d3-de7dbf4350fc.xlsx



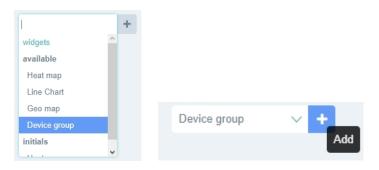
Individual device display Clicking on a device name displays the individual sensor screen.

ID:	553		
Name:	cresswatch-0327		
Label:	Demodevice		
Customer:*	Quantified development $\checkmark$		
SAVE Save an	nd add another Save and continue editing		

In the "GENERAL" view it is possible to give the device a specific name (label). The start and end of the graph period can be selected and one or more parameters to be displayed can be selected to the right. For each parameter an individual graph is displayed for the selected period. In the view "LOCATION" the location coordinates can be entered manually. NOTE: If the sensor device has a GPS module, the location will be entered periodically by the system. The view "CHART COLOURS" can be used to choose the color of the graph line.

## Grouping sensors

The "device group" widget creates one graph on the home page that displays the same parameter from multiple sensors in one graph.



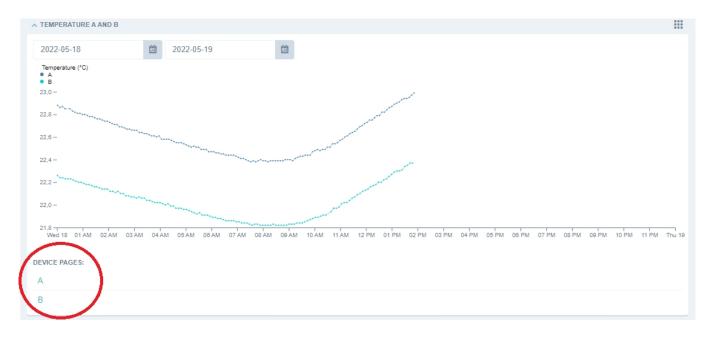
## Defining sensor groups

Go to the widget settings to add a name to the group and select the desired measurement. When Multi Poseidon is selected as the measurement in the field, all measured parameters of this sensor are displayed. In the "Field" the desired parameter can be selected and in "Devices" the different sensors. NOTE: When selecting sensors, the name/text of the "Label" is used.



Title:*	Device group	Title:*	Device group
Field:*	Temperature (°C)	Field:*	Temperature (°C)
Devices:*		Devices:*	×A ×B
SAVE	select all deselect all		
SAVE	A B	SAVE	

It is possible to select multiple devices by holding down the CTRL key when selecting from the list.



At the bottom of a "Device group," all sensors in the group are displayed. The names are also active links to the individual sensor page.



## Changing the color rendering of a sensor

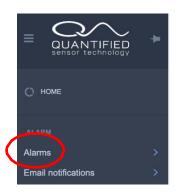
The color of sensor graph lines can be set through the chart colors tab on the sensor page. These colors will also be used in the sensor groups on the dashboad.

GENERAL LOCATION CHART COLORS		
SENSOR	COLOR	DELETE?
Multi Poseidon Probe 1 $\vee$	Red 🗸	
Single quantity value 🗸	Yellow	
V	V	
+ Add another Chart color		
SAVE Save and add another Save and continue editing		x delete
2022-05-18 🛍 2022-05-19 🛍 🗙 Tempe	rature (°C)	
Temperature (*C)		
23,6 -		
23.4 -		
23.2 -		
23,0 - 22,8 -		
22,8 -		
22,4 - Wed 18 01 AM 02 AM 03 AM 04 AM 05 AM 08 AM 07 AM 08 AM 09 AM	10 AM 11 AM 12 PM 01 PM 02 PM 03 PM 04 PM 05 PM 06 P	M 07 PM 08 PM 09 PM 10 PM 11 PM Thu 19

### Alarms and notifications

Users as of the "Silver" subscription level can set alarms and alarm messages. Alarms can send a notification to your e-mail address when a value goes above or below a preset threshold. Alarm status is checked every 30 minutes. This means that the last reading before xx:00 or xx:30 is used to determine the alarm status. Any user can see all alarms and settings for e- mail notifications within your account.

Alarms can be viewed from the main menu:



<u>Creating an alarm</u> In the "Alarms" overview, click "Add Alarm" add



By state	$\sim$			+ Add alarm
		STATE	LAST STATE CHANGE	
Firefly B		alarm	12-05-2022 10:00	
Firefly A		ok	12-05-2022 13:00	

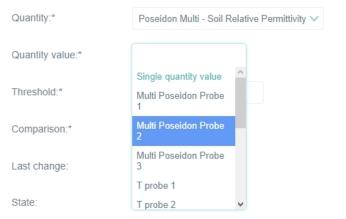
In alarm settings, the user can set an alarm name, enable/disable the alarm, and select the sensor to which the alarm will be set.

Name:*	Firefly A	
Is enabled:	Yes 🗸 🗸	
Device:*	A ~	
Quantity:*	PAR (µmol∕(m²s)) ∨	
Quantity value:*	Single quantity value $$	
Threshold:*	25,0	
Comparison:*	Above threshold $\checkmark$	
Last change:	May 12, 2022, 11 a.m.	
State:	ok	

# Selecting the alarm activation threshold

To select alarm activation, select the desired parameter (Quantity).

For example, if the alarm is to be set to Relative Permittivity for Multi Poseidon probe 2:





### Setting the activation threshold

The threshold can have any numeric value with one decimal place. For negative values, use a minus sign (-). The Equation field defines whether the alarm sounds if the measurement is above or below the threshold.

### Adding an email address to the alarm

First, set up an e-mail notification. In the main menu, go to "Email Notification" and then click on Add Email Notification in the upper right corner.

E QUANTIFIED sensor technology		
() номе	Name:*	notification 1
ALARM	Sendto:*	user@domain.com
Alarms > Email notifications >	SAVE Save and add	d another Save and continue editing

After the fields are completed and saved, it can be used for multiple alarm settings. Navigate back to the "Alarms" page alarm and click on "ALARM NOTIFICATIONS"

	HOME > ALARM > A			
	Name:*	alarm B		
GENERAL ALARM NOTIFICATIONS			DELETE?	
notification 1			Remove	
V			Remove	
+ Add another Alarm notification				
SAVE Save and add another	Save and continue	editing		× DELETE

Here, one or more e-mail notifications can be added to an alarm. This allows multiple users to receive an e-mail when an alarm is triggered. Don't forget to save the settings!



## Manually setting a sensor location

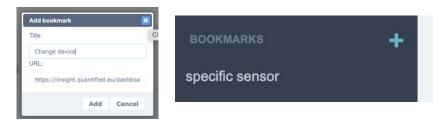
It is possible to manually set a location for a device by clicking on the map (blue pointer appears) and clicking "save location". Please note that it is not possible to see whether a location was set manually or by the GPS. The manual location will be overwritten on a new GPS update of the device (only in case the sensor is equipped with a GPS module). Therefore, this is only recommended for Firefly's without GPS or when they are in a location where they cannot get a GPS fix. A manual sensor location is not displayed on the GEO map on the dashboard page, it is only displayed on the location map in the individual sensor view.

GENERAL LOCATION	
+ Maresingel 26 29 32A Maresingel 26 29 32A Maresingel 26 29 32A Maresingel 26 29 32A Maresingel 26 29 32A	52.16380376093963
Maresinger 48 50 seel 48 50 to the see to the sec tot the sec to t	4.497496224939824
70K	Change location
IA 18 59 61B 12 67 73 8 87 95 C Langegracht B 182 190. 2107 8 87 95 C Langegracht B 182 190. 2107 8 95 95 95 95 95 95 95 95 95 95 95 95 95	
SAVE Save and add another Save and continue editing	

## Bookmark

In the right-hand column under "Bookmark" it is possible to link to a specific device.

By clicking on the "+" next to bookmark at the time the device graphic is open, a direct link can be created be made to the desired device.



## Downloading large data sets

Large data sets can be downloaded via the API. If this is needed frequently, it is recommended to do this programmatically. Note that all time specifications in the API are in UTC format! Find the ID of a Firefly on the individual sensor page (Devices).





#### Go to <u>https://insight.quantified.eu/api/doc</u>

Click on the measurement to be downloaded and click in the blue field to open it.

soil_electric_conductivity_events	>
soil_relative_permittivity_events	>
soil_temperature_events	>
temperature_events	~
GET /temperature_events/	temperature_events_list
token	>
tprobe_events	>
wind_events	>

Click "Try it out" to complete the required fields.

temperature_events		$\checkmark$
GET /temperature_even	nts/	temperature_events_list 🔒
Events with temperature in °C.		
Parameters		Try it out
Name	Description	
device_id string (query)	Limit events to a specific device, or multiple devices (separate id's by commas).	
(4))	device_id - Limit events to a specific device, r	
gateway_receive_time string (query)	Limit events to a specific DateTime (format yyyy-mm-ddThh.mm.ss)	
(1)/	gateway_receive_time - Limit events to a spe	
gateway_receive_time_after string (query)	Limit events after a specific DateTime (format yyyy-mm-ddThh.mm.ss)	
(1)/	gateway_receive_time_after - Limit events af	
gateway_receive_time_before string (query)	Limit events before a specific DateTime (format yyyy-mm-ddThh.mm.ss)	
(4	gateway_receive_time_before - Limit events	
CURSOF string (query)	The pagination cursor value.	
(44-5)	cursor - The pagination cursor value.	
limit integer (query)	Number of results to return per page.	
	limit - Number of results to return per page.	

To download data from multiple Fireflys, add their IDs separated by a comma with no space. The time window for which the data is to be downloaded can be specified in the "gateway\_receive\_time\_after" and "gateway\_receive\_time\_before" fields. These are specified in the UTC time zone! The limit is used to specify the maximum number of results in the download. The default value is 100. Be sure to increase this number if there are many data points!

When you click "Run," a request URL is generated. This URL can be copied into the browser. On this page, the drop-down menu next to "Get" allows you to select the .xlsx file format for an Excel download.



Api Root / Temperature List		format for the GET request
Temperature List	Filters OPTIONS GET	•
Events with temperature in °C.	jso	in
	« Previous api	

The file is downloaded, but it must be renamed with the file extension ".xlsx" to open it in Excel.

Data storage

The Quantified Insight subscription includes data storage for 2 years.

API: using other data platforms

If you want to export your data to another platform, you can use our API. All the necessary information can be found in the links below.

APIhttps://insight.quantified.eu/api/Swagger UIhttps://insight.quantified.eu/api/doc

Test accounttest-api-user Password MDD\$kF9BztHQJRt