**Quick start guide**



**Web app:**

**www.iot4water.de**

for computers and smartphones

# Table of contents

# 1. Web app / user interface

Use:

The web app can be used with both smartphones and computers.

    A. Use via computer:

When using a computer, there are no special things to consider. The user interface https://www.iot4water.de works as standard.

    B. Use with the smartphone:

The web app can be used with both Android-based and iOS-based smartphones.

When using a smartphone for the first time, the web address https://www.iot4water.de must be entered into the smartphone's internet browser and then called up. It is then necessary to log in with your user name and password (both issued by MMM).

Then have your access data saved by your smartphone's Internet browser (the smartphone normally asks for it) and add the login page of https://www.iot4water.de to the start screen of your smartphone.

If you proceed as described, you only need to enter your name and password the first time you log in.

Provided that the login page of https://www.iot4water.de has been added to the home screen of the smartphone and the access data has been saved, a small icon appears on the home screen of the smartphone, just like a conventional app, which only needs to be tapped with a finger to log in and access the data.

**Registration:**

**Address: https://www.iot4water.de**

On the PC:
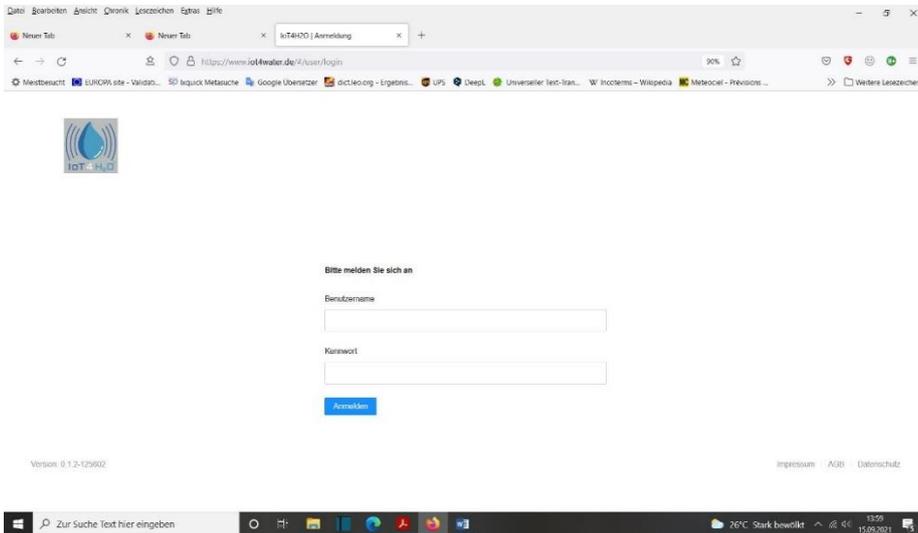


On the smartphone:



Your user name: Has been communicated in a separate message

Your PW: Was communicated in a separate message

## 2.    Dashboard

The dashboard offers various options for graphically displaying the measured values. For example, the data from several devices can be displayed on one screen. The devices are assigned in the Manager account under Device administration.
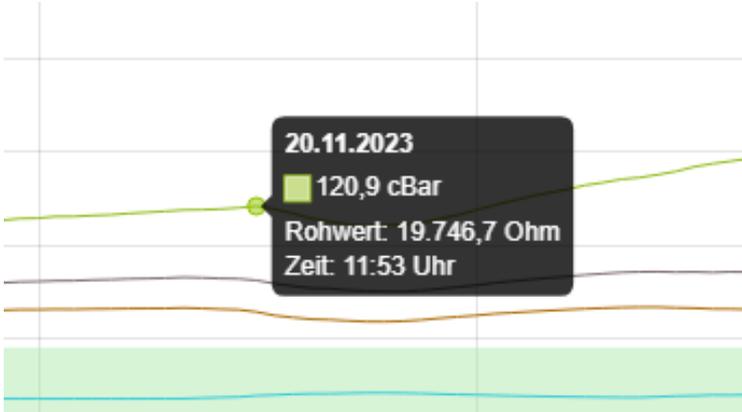
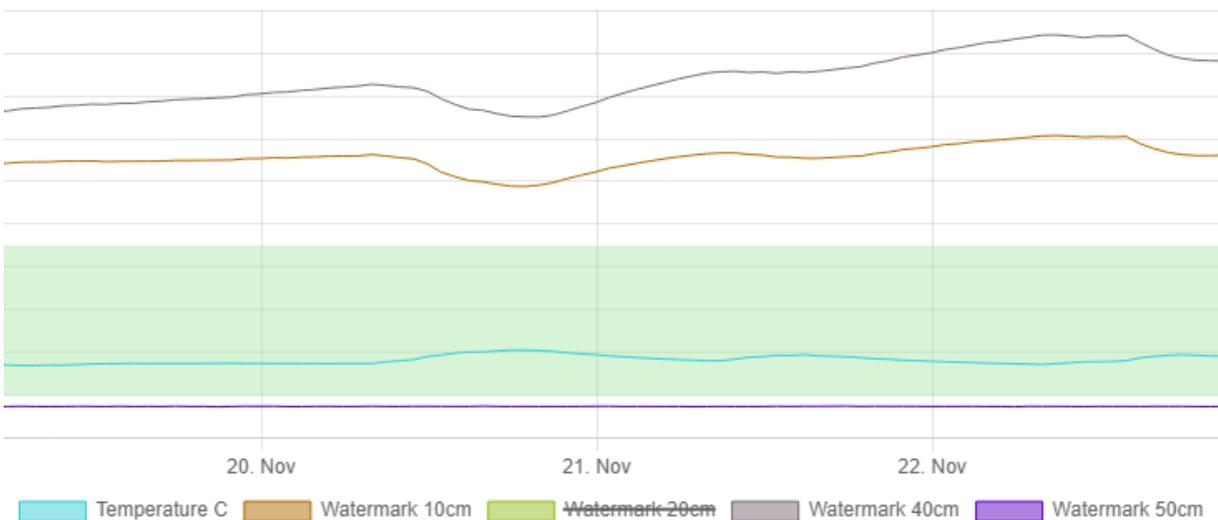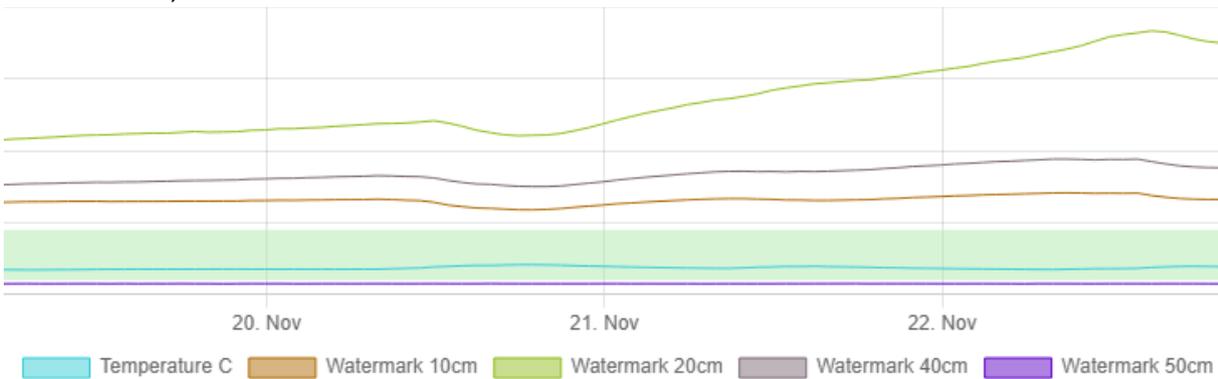Example graph with data from one device (4xWatermark, 1xSoil temperature):
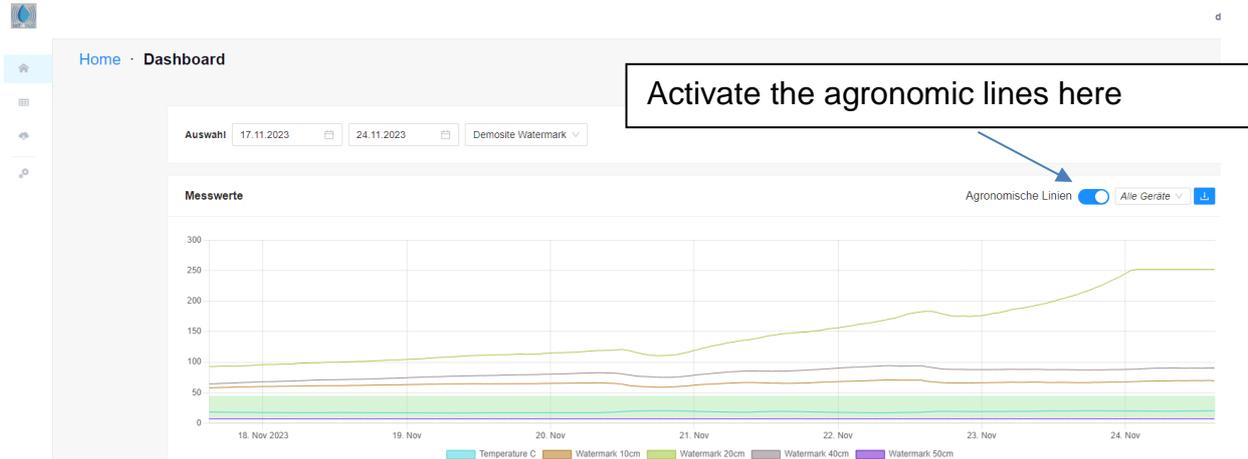


The agronomic lines are displayed (green area). The limit values can be set under Administration/Global Settings (blue arrow).

The individual measured values are displayed by moving the mouse over them in a window with a black background:

20.11.2023
☐ 120,9 cBar
Rohwert: 19.746,7 Ohm
Zeit: 11:53 Uhr

Individual measured values can be shown or hidden by clicking on the legend (sensor crossed out):

20. Nov          21. Nov          22. Nov

☐ Temperature C   ☐ Watermark 10cm   ☐ Watermark 20cm   ☐ Watermark 40cm   ☐ Watermark 50cm

20. Nov          21. Nov          22. Nov

☐ Temperature C   ☐ Watermark 10cm   ☐ Watermark 20cm   ☐ Watermark 40cm   ☐ Watermark 50cm

Everything can be selected, from the area selection to the device selection to the desired time period of the data.
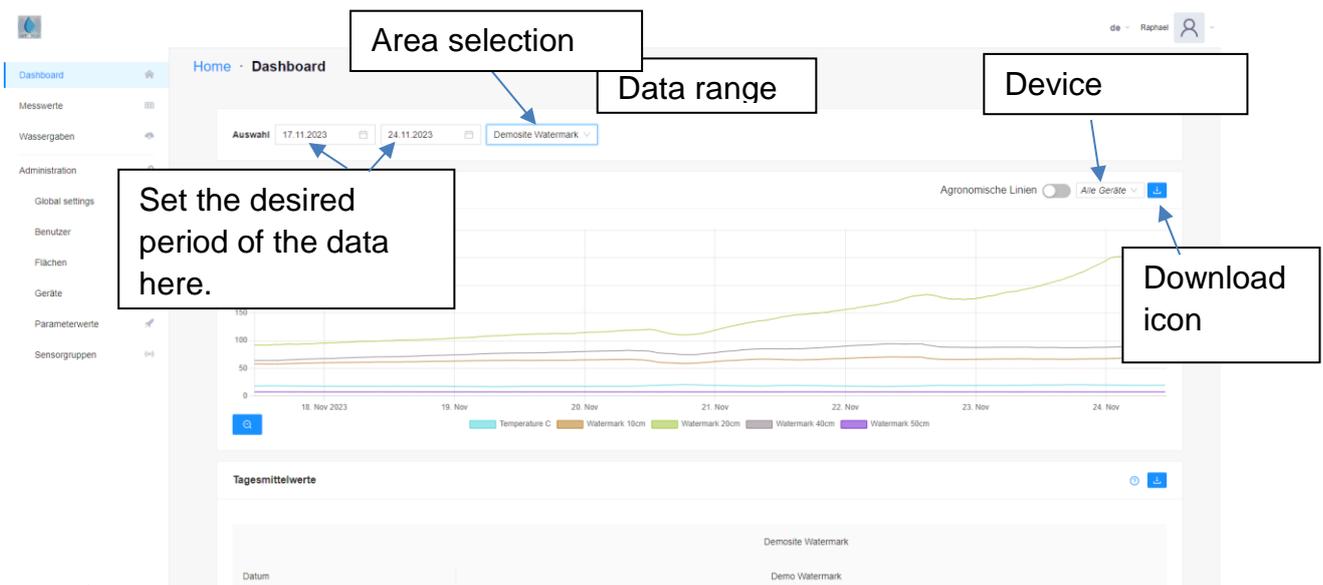


If you click on the blue download symbol on the far right above the graphic, you can download it as an image file.

If you click on the blue download symbol on the far right above the hourly averages table, the saved data will be downloaded to your computer as a .csv table and opened there. (With Excel, it is necessary to convert the .csv (= comma separated value) table format into the Excel data format first. Command: Data / Text in columns).

## 3.   Mean values

A list of the hourly average values is displayed in tabular form below the dashboard for the displayed sensors of this area. This list can be downloaded as a csv file using the download icon.
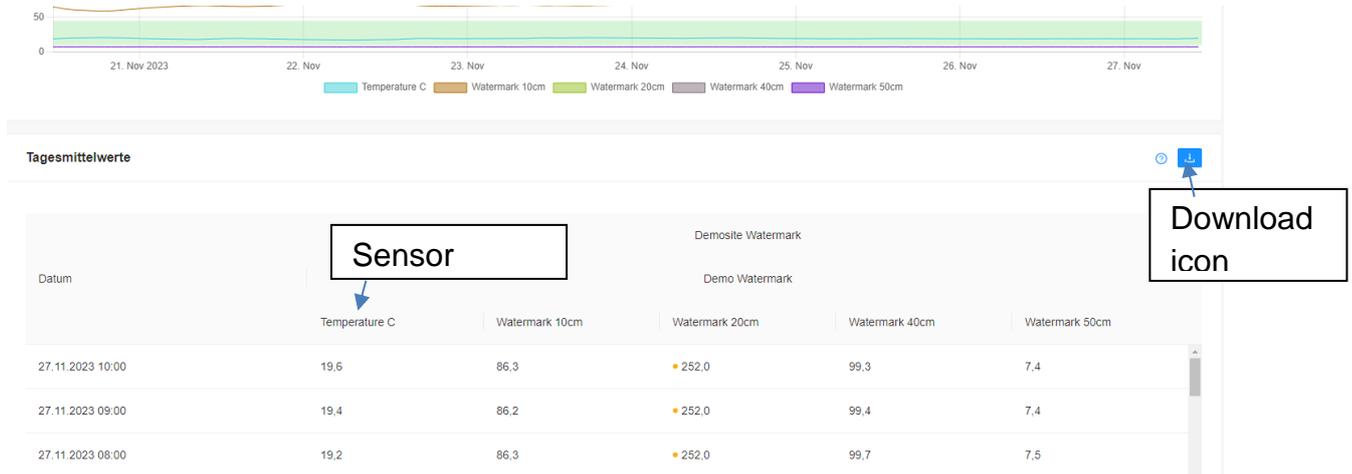


## 4.   Measured values

In this view of the navigation bar, the measured values of the sensors of the associated area from the dashboard are displayed in a table. The area can be selected together with the associated device in a specific period. This list can also be downloaded.
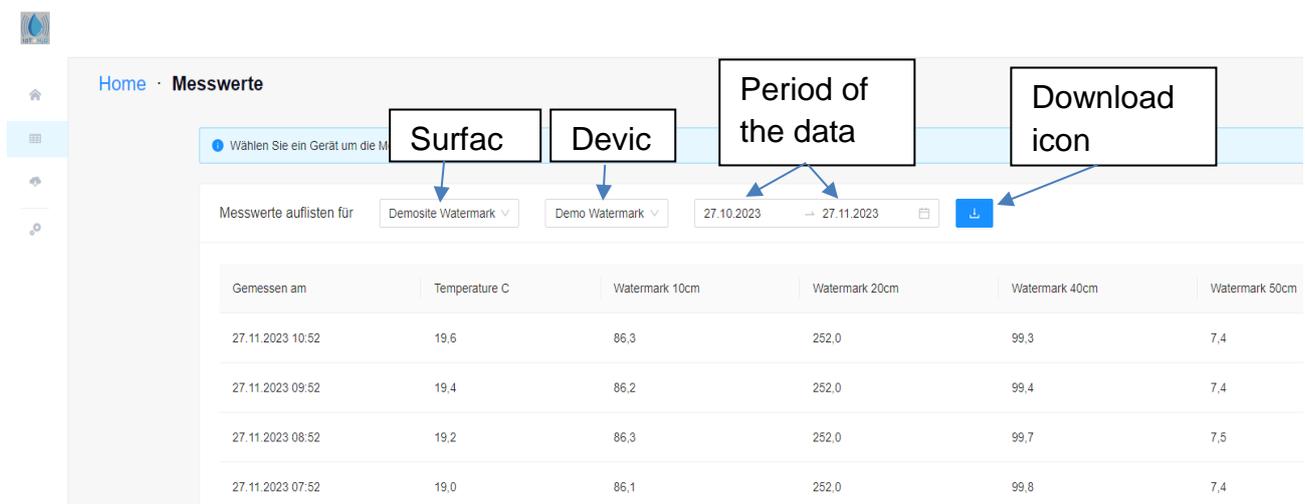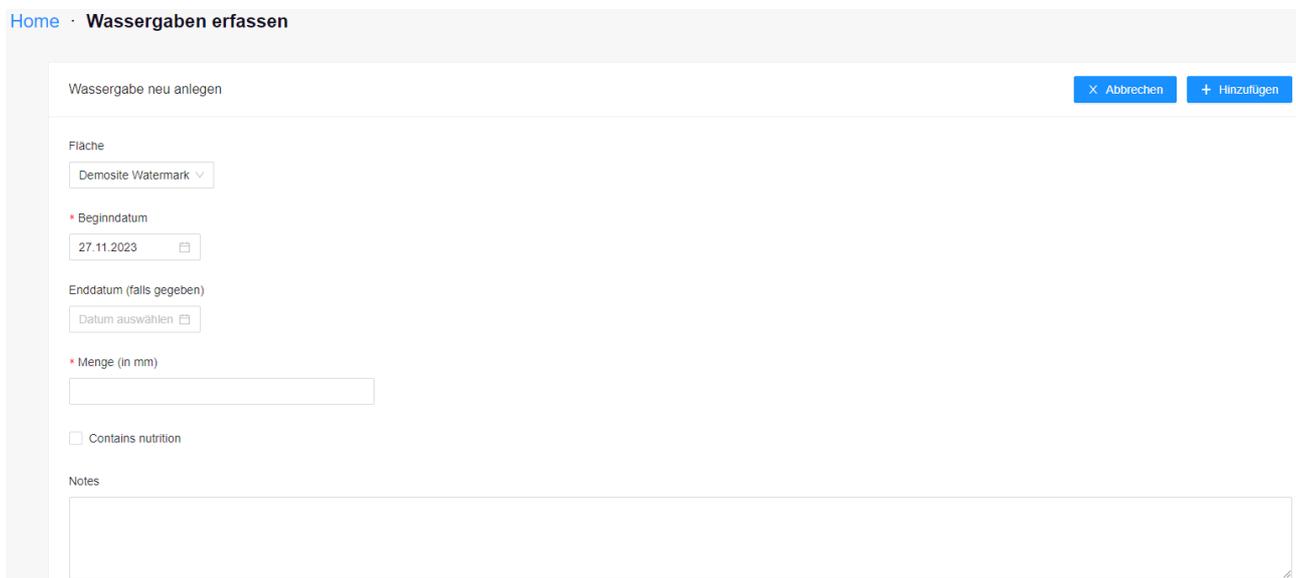
# 5. Watering

In this menu item, you can enter your water consumption. These are not displayed on the dashboard or in the measured values and therefore only serve as a log.
You can create a new entry using the "New" symbol (blue arrow).
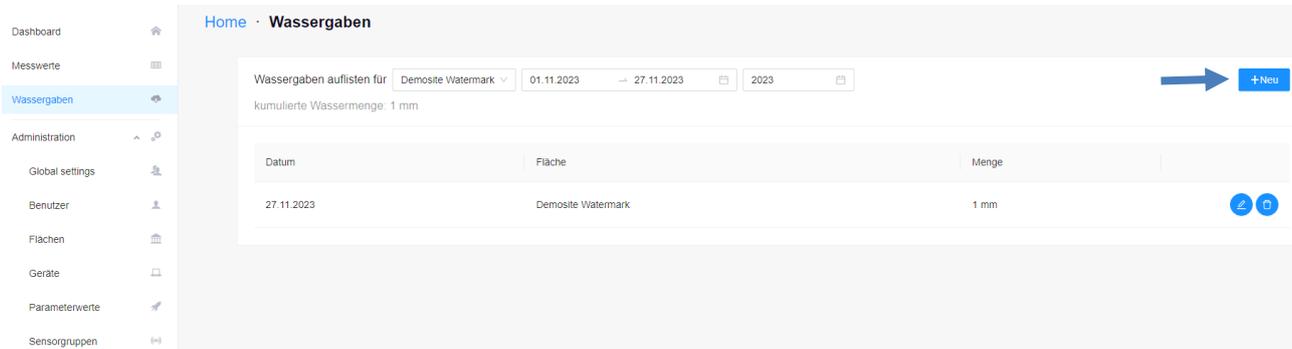


To do this, select the area, the start date of the irrigation and, if applicable, the end date. Below this, you can enter the quantity, whether fertilizer was present and enter notes. You can change the unit of measure under Global Settings. You can then add it to the water fork list using the "Add" symbol.

# 6. Administration
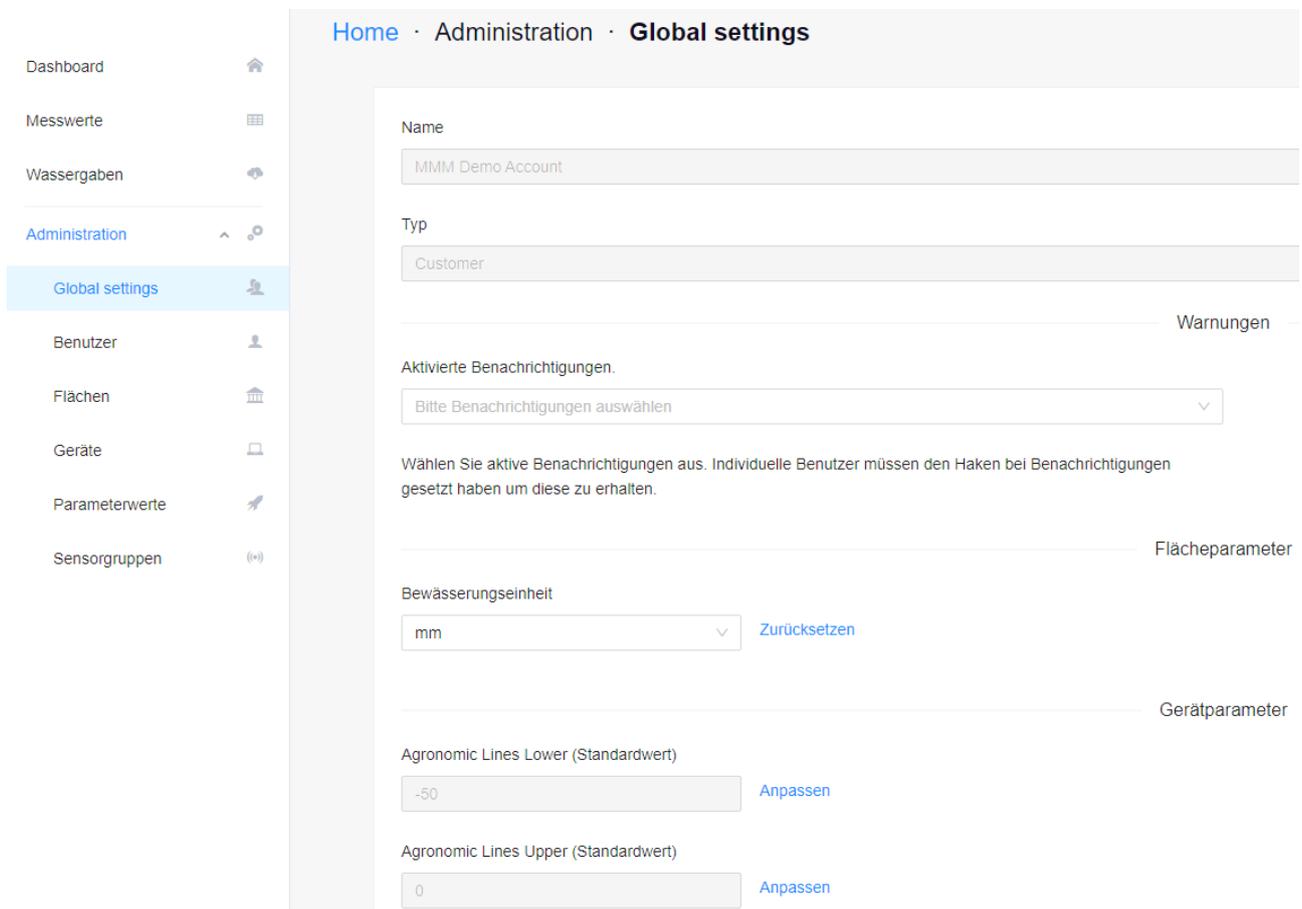
## 6.1 Global Settings

In the Global Settings, settings can be defined that apply to the entire account in the form of default values.

Activated notifications can be selected here for warnings.

The irrigation unit for watering is set here.

The numerical value between the Agronomic Lines Lower and Upper forms the green strip on the dashboard graphic in which the values are in the optimum range.

These can be set individually for each area again afterwards in the "Areas" tab.

## 6.1.1 Warnings

Our web app monitors the status of devices and sensors, such as battery level, temperatures, soil moisture, etc., with every data transmission from a device and automatically sends warnings to your e-mail stored under User in the event of critical conditions such as a device battery that is almost empty, risk of frost, excessive temperature, etc. The e-mails contain details of the affected device/sensor and the specific warning. This enables a quick response to potential problems and supports proactive maintenance.
You can set which warnings you would like to receive for all users. These can also be activated individually for each user with "Manager" status.
You can set the point at which a value is in a "critical state" separately for each sensor under the "Devices" menu item.

Warnungen

Aktivierte Benachrichtigungen.

Bitte Benachrichtigungen auswählen

Wählen Sie aktive Benachrichtigungen aus. Individuelle Benutzer müssen den Haken bei Benachrichtigungen gesetzt haben um diese zu erhalten.

## 6.2 Users

If additional persons are to be granted access to the data, it is possible to create further sub-accounts (users).

Create a new user here

Click here to edit
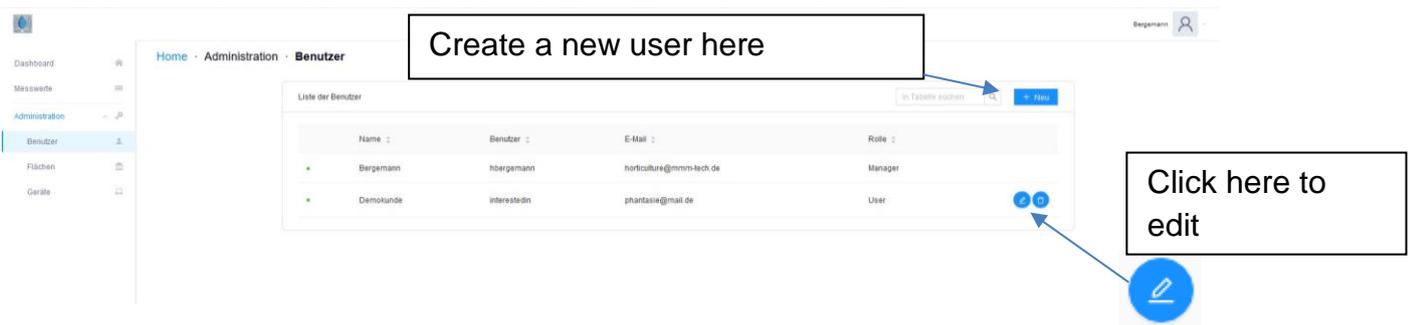
To do this, create a new user under the menu item User. The name and password of a new user can be freely chosen. The password should be secure and the user name should be unique. A separate, individual email address must be entered for each new user.

Each additional user should be assigned the role (or status) "User", as the owner & main user of the IoT4H $O_2$® devices from MMM already has the role of

manager (with more accounts than one user) and this role should only be assigned once per account.

The edit icon can also be used to set for each user whether they should receive warnings and notices by e-mail (blue arrow) (as already mentioned under the heading "Warnings" in these instructions).



## 6.3 Surfaces

Each IoT4H O$_2$® device must be assigned to an area. An area is either a field, a tunnel or a greenhouse or any other monitoring and cultivation unit. Several devices can also be assigned to an area. It is also possible to define the agronomic lines, i.e. the optimum area (green zone) in the graphic in the dashboard for each area by editing each area. In the editing window, it is also possible to enter a note for the respective area.
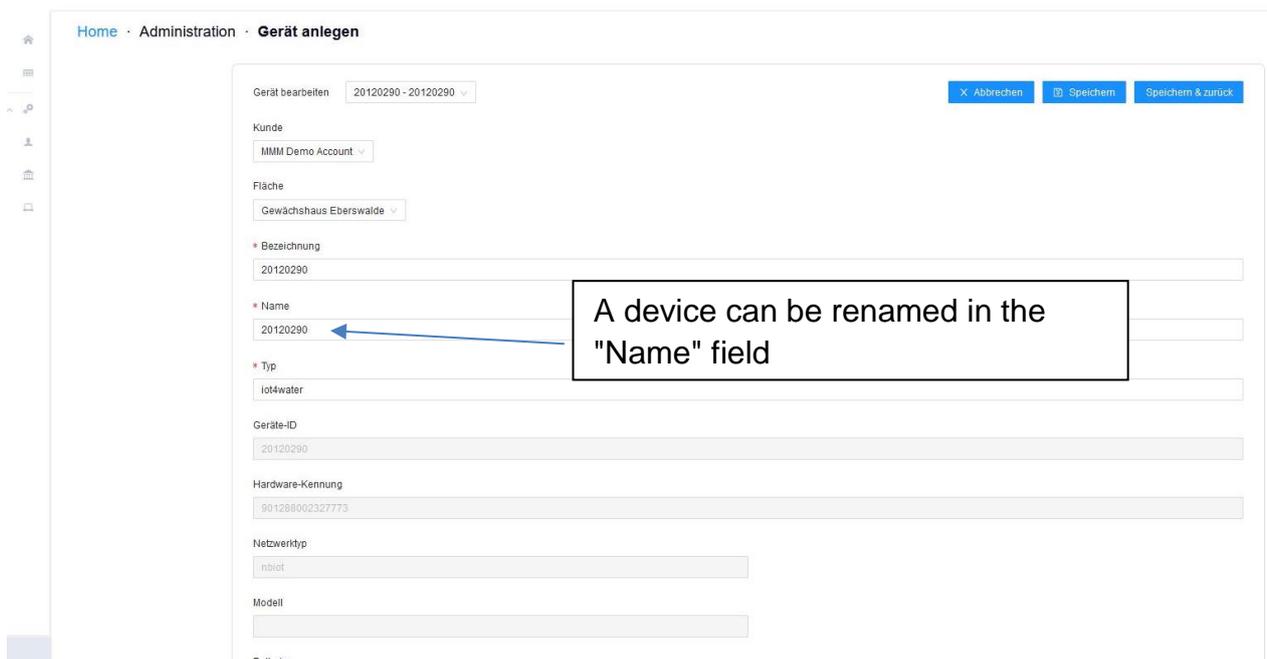
## 6.4 Devices

On delivery, the station(s) are identified by their ID number in a customer account. It is possible to rename the devices individually (in the Name field) under the menu item "Devices".



This screen then appears:



The sensors of a device appear further down on this page.

Before delivery, MMM named the sensors of the IoT4H O₂® devices in the customer account. Example: Substrate moisture 1 / Substrate moisture 2 / Substrate moisture 3. It is possible to rename the sensors individually (in the Name field) under the "Devices" menu item.

You now have the option of setting up **alarms** for the individual sensors of a device. To do this, please use the two text fields on the right-hand side of the table. In the left-hand text field, enter the minimum value below which an alarm is triggered. In the right-hand text field, enter the maximum value above which an alarm is also triggered. The threshold values should be selected according to the respective sensor and the requirements.



A sensor can be renamed in the Name field

Please do not change these fields. The port, the sensor type and the internal designation are saved here. For advanced users only

Set alarm values

Example with temperature sensor warning thresholds entered.

This quick start guide was created using various IoT4H O$_2$® devices as examples. The illustrations correspond to the display on the computer. The display on the smartphone is slightly different.