Content

ALLNET MSR Help

ALLNET MSR - Support

Welcome to the ALLNET MSR help/online manual website. Here you will find all the important information about our measurement and control products, or I&C devices for short.


WLAN
POWER 12VDC
USB
CONSOLE
LAN
ALLNET
ALL3419
I2C 3
I2C 2
I2C 1
FW RESET
POWER LAN ACT
3
2
1
FW
RESET

! This online manual as well as the pictures were created with software patch 10xx ~1106. As of software patch 1107, the web interface has been slightly rejuvenated, individual icons may have changed slightly.

Overview of ALLNET MSR end devices

ALLNET MSR end devices

The IP-based control, measurement and regulation systems from ALLNET offer you modern, cost-effective and comprehensive solutions for the management and control of your IT systems and/or other technical building equipment.

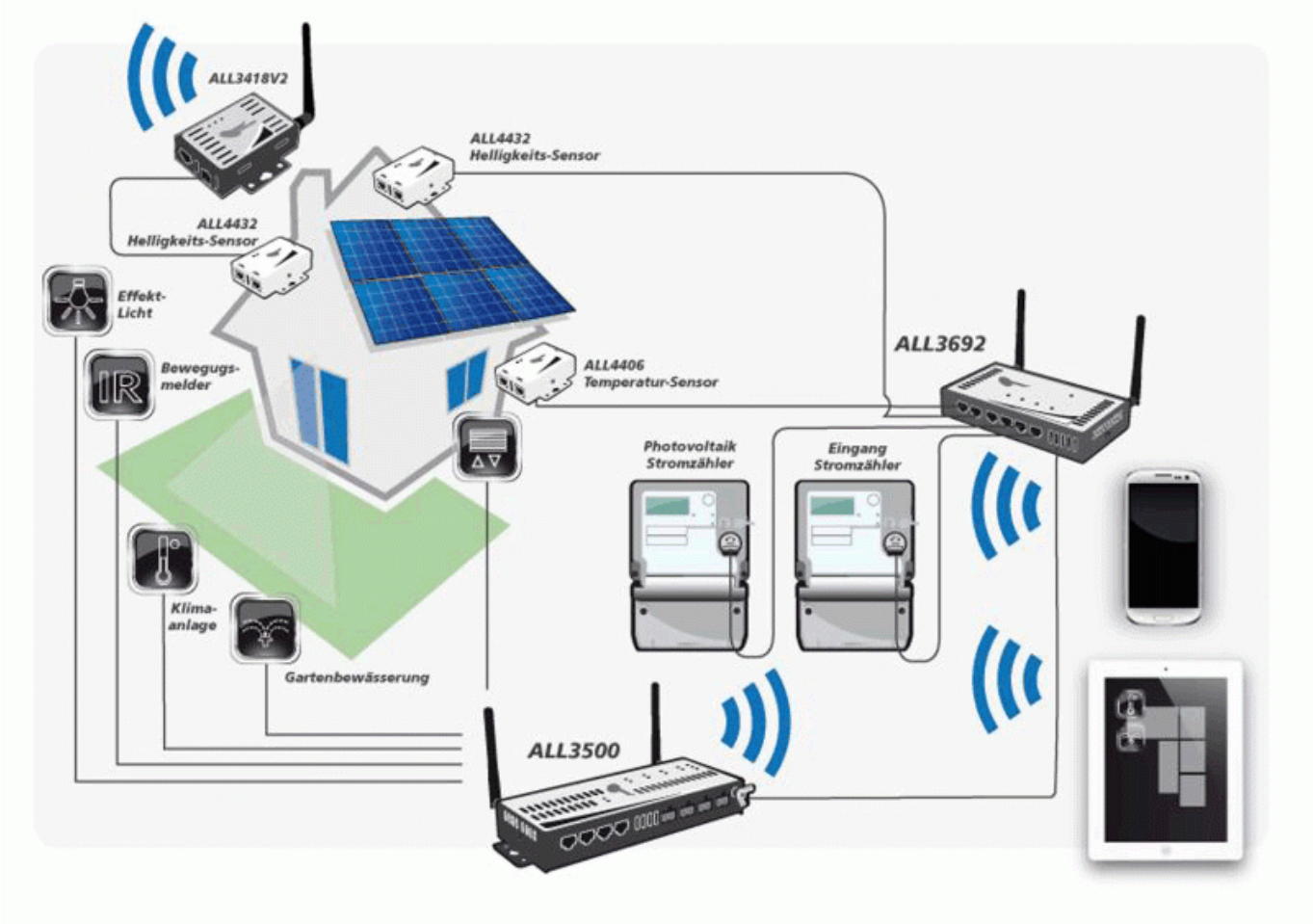
- The basis - control centers & gateways
- IP Powermeter
- Controllable IP sockets, relays
- CO2 Smart traffic light / CO2 air traffic light
- IP-based RGBW signal light with buzzer
- Accessories - Sensors / Actuators
- Software modules
- DIY-Maker-Home-Automation
- FAQ - Frequently asked questions about home automation

Building automation via network

You control everything from a PC, notebook or other mobile device. Regardless of whether the devices you want to control, measure or regulate are located in the same building or on another continent.

Your existing computer network and the Internet serve as the medium.

- Measure ambient values such as temperature, humidity, air pressure, etc.
- Receive alerts about temperature limits, water levels, gas odor, movement reports simply by e-mail
- Carry out switching operations worldwide from your PC
- Integrated JSON / XML API interfaces for external software/applications available
- Optional MQTT connection for cloud connections "see optional software modules"
- Web interface can be accessed via HTTP or HTTPS.
- Various user rights can be selected for the web interface.
- These are just a few examples that can be realized cost-effectively and without great effort with the IP control, measurement and regulation systems from ALLNET.



In addition to the regular measured values such as power consumption and power feed-in from the photovoltaic system, the status of all components can be monitored from anywhere via the network.

Übersicht „click“

The MSR control panels

The MSR control panels

The basis - IP control centers Intelligent building technology helps to increase security and comfort and at the same time actively reduces energy costs.

Centrally controlled and accessible via the Internet, ALLNET building automation enables intelligent and flexible access to the building technology, regardless of personal location. In addition to monitoring sensor values, it is also possible to switch actuators and other consumers. The control centers are scalable and can be networked with each other across locations, allowing them to be adapted to a wide variety of scenarios.

The ALLNET sensor meters can be used to control and switch lights, blinds, ventilation or any connected devices. In addition, temperature detection for demand-based heating of individual rooms, control of garden irrigation, alarms in the event of gas odors and water ingress, automatic opening and closing of blinds depending on daylight and much more can be implemented. There are no limits to your ideas.

! For more details on ALLNET MSR products see website https://www.allnet.de/de/allnet-brand/produkte/building-automation/ !

CO2 traffic light - network lamp

CO2 traffic light - network lamp

CO2 Smart traffic light / CO2 air traffic light

ALLNET PoE network RGBW lamp

CO2 traffic light for infection protection ventilation in schools (FILS-R) The universal network signal lamp with integrated NDIR CO2 sensor comes in an attractive plastic housing. The lamp is supplied with the required power via an environmentally friendly plug-in power supply or via PoE (power supply via a single network cable with data and power). The ALLNET PoE lamp is equipped with a high-quality industrial multi-sensor that offers a high CO2 measuring range of 0~40000ppm. In the ideal range (25°C, 400 - 10,000 ppm) it offers an accuracy of ± (30 ppm). The signal lamp automatically converts the measured variables into an optical standard signal, which can be directly displayed in the respective color via the integrated LED.

The indoor air traffic light serves as a guideline for room ventilation for infection protection in daycare centers/kindergartens, large daycare centers, special education daycare centers, offices, fitness studios, hotels, retirement homes/nursing homes, waiting rooms, retail stores, clubhouses, authorities and public facilities, churches or other prayer rooms and, of course, schools.

This enables energy-saving and needs-based room ventilation, thus reducing operating costs and increasing the well-being of the people in the rooms.

In general, it is recommended that ventilation should be provided from a concentration of 1000 ppm CO2 in the indoor air (yellow level), but ventilation is required from 2000 ppm (red level) to ensure adequate indoor air quality. For schools, a threshold value of 1000 ppm is considered to be decisive. The aforementioned limit values refer to the instantaneous value. If the CO2 concentration rises above this specified value, a ventilation measure - manual ventilation via windows or automatic activation of a ventilation system - should ideally be taken. If the CO2 content is below the critical threshold, it can be assumed that the virus concentration in the air is also reduced.

The alarm is triggered via a visual display and can optionally be implemented acoustically or via e-mail, FTP or upload to the cloud.

Preset limit values: (can be changed in software)

- at 0~999 ppm: level green
- at 1000~1999 ppm: level yellow
- at 2000~10000 ppm: level red

The advantage of the ALL-PoE CO2 lamp over other CO2 lamps currently on the market is that the ALLNET version has an intelligent/smart signal lamp with its own integrated web interface, where you can define your own limit values, for example.

Added value of the ALLNET solution compared to similar solutions:

- If the standard values change, e.g. new specifications from the Federal Environment Agency, the ALLNET version can always be flexibly adapted to the new standard via the web interface.
- All lamps can be visualized via the integrated web interface. The values can also be tracked by the parents of the class via the cloud.
- In the ALLNET version, you can also configure a recording of the values and export them as CSV/XLS data.
- In the ALLNET version, you can configure a rule that sends the values by email if they are exceeded/fallen short of, etc.
- The ALLNET version also includes a buzzer that can be used for optional actions.
- The ALLNET version also includes an additional sensor port from our measurement and control product series. You can use this sensor port to connect a variety of external sensors for temperature or humidity through to contact inputs with magnetic contacts for detecting window openings.

The high-quality Sensirion "Made in Swiss" multisensor has an integrated two-channel principle for measuring carbon dioxide concentration and is designed to automatically compensate for possible long-term drift.

Possible areas of application:

- Office space
- Waiting room of a doctor's surgery
- Patient room in the hospital
- Retail sales area
- Open plan office
- Conference room at the lawyer / tax consultant
- Hotel room / lobby
- Fitness studios
- Restaurants and bars
- Authorities / public institutions
- Clubhouses
- Churches / mosques / prayer rooms, etc.
- Assisted living rooms
- Retirement home / nursing home
- Kindergarten
- Large day care centers
- Curative education day centers

- Daycare centers
- Daycare centers
- Classroom

! For more details on ALLNET MSR products see website https://www.allnet.de/de/allnet-brand/produkte/building-automation/ !

ALLNET MSR sensors Commissioning

ALLNET MSR sensors Commissioning

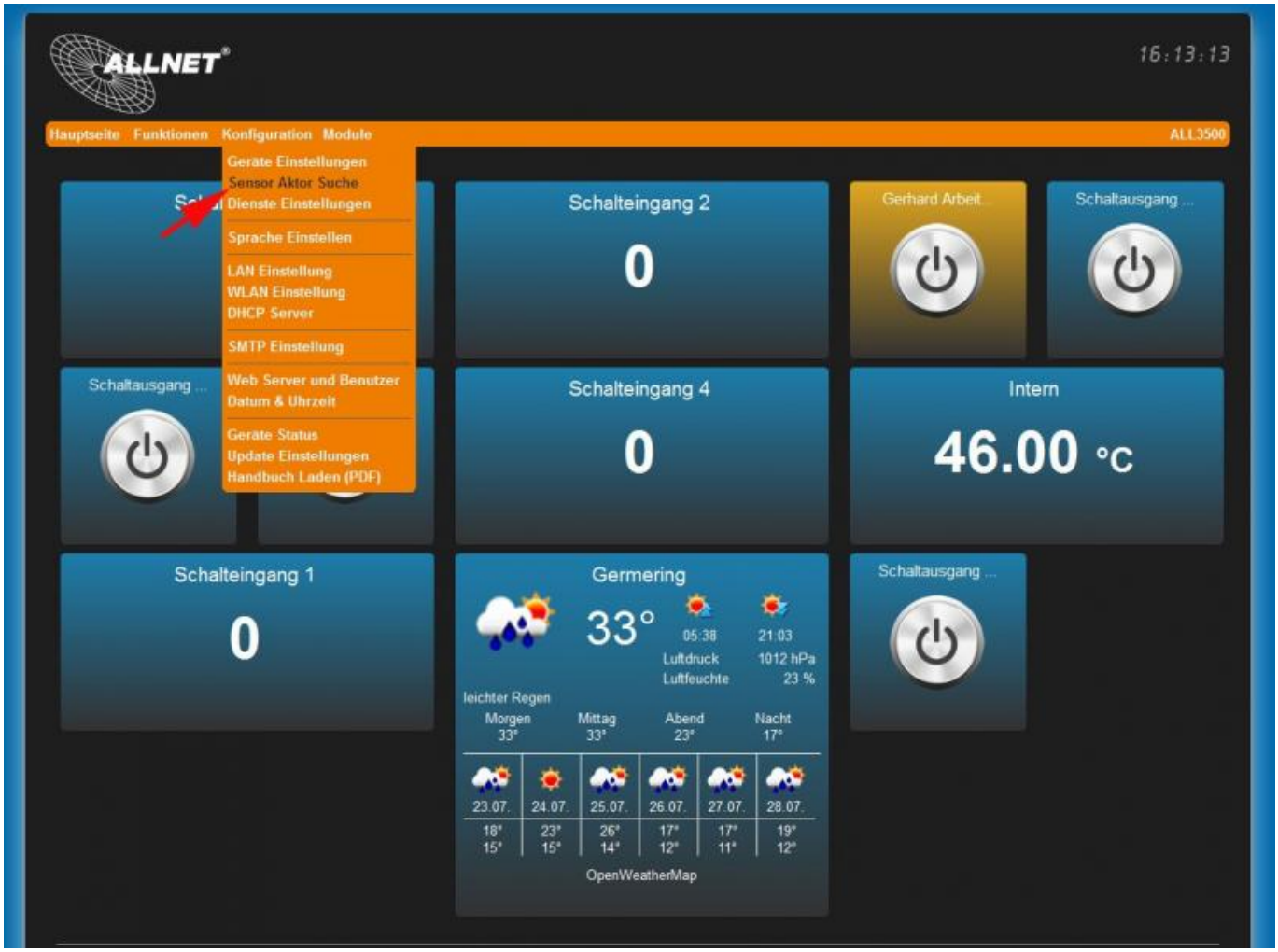
The external sensors/actuators are either plugged directly into the I2C ports on the control panels or can be connected remotely via a cable. You can use a simple network cable (RJ45 plug) to connect the sensors/actuators to the power meter remotely, Cat. 5). However, existing network or telephone cabling can also be used. The maximum cable length between the power meter and the module can be up to 100 meters. The modules are supplied with power via the control panels. A separate power source for the individual modules is not required.

The ALL4404 8-port multiplexer module can optionally be used to connect several modules to the control units. This allows up to 8 sensors/actuators to be connected to the I2C port of the control units and into the web interface. Attention: Not all sensors are compatible with the Multiplexing HUB.

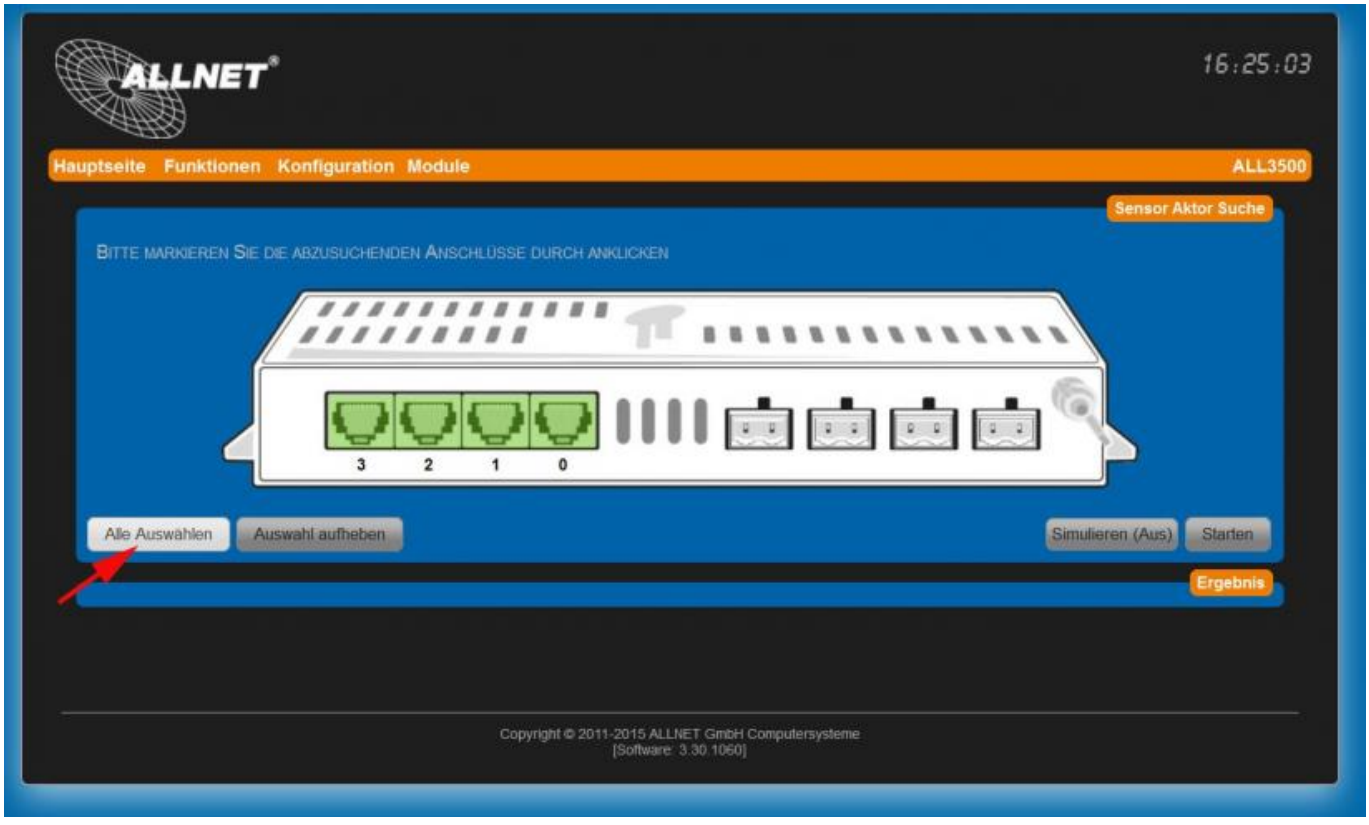
Setting options under "Configuration" > "Sensor Actuator Search". I2C sensor/actuator ports are available on the control units. You can use all sensors and actuators from the ALLNET program that work exclusively with a supply voltage of 3.3 V. The connection is made either directly or via a so-called ALL4404 multiplex hub.

Manual sensor actuator search

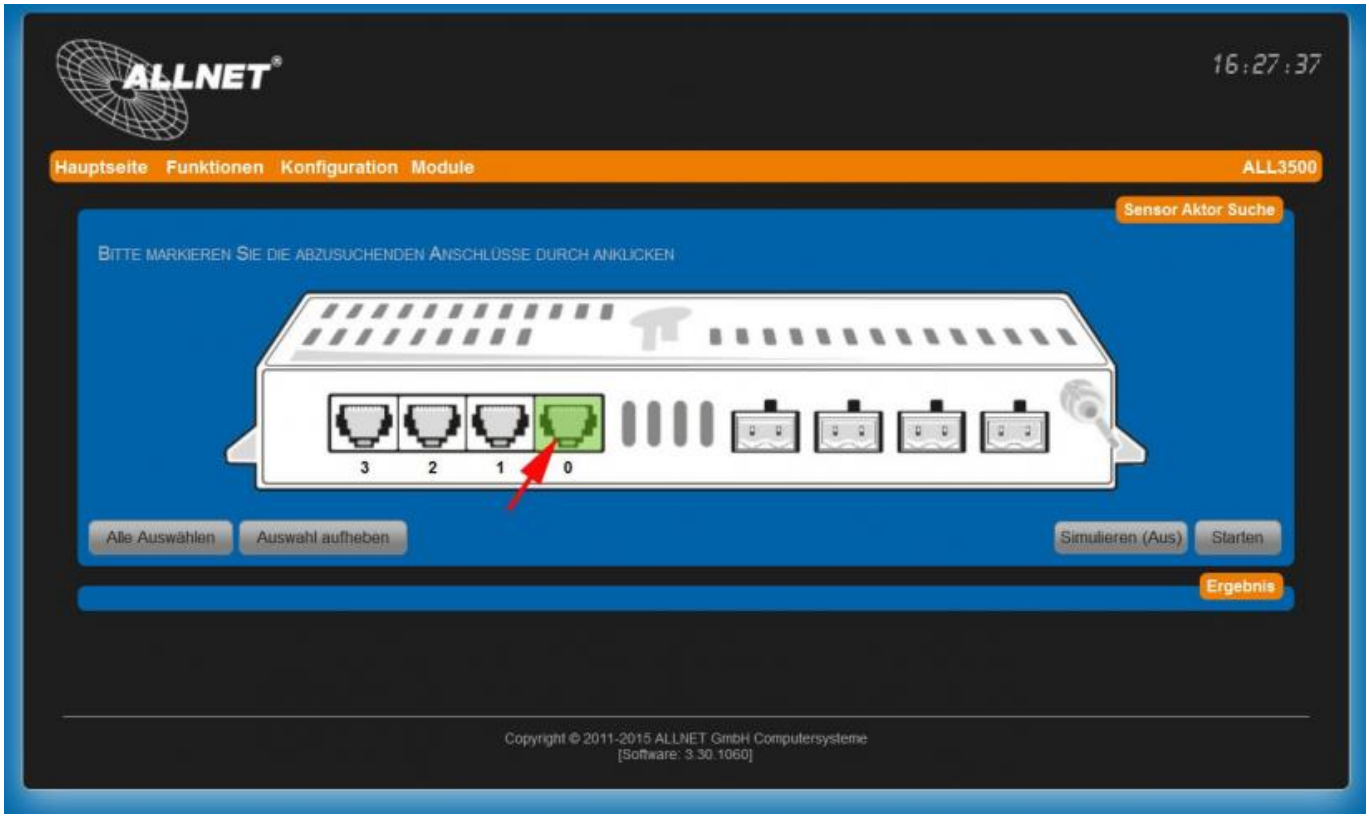
Step 1: Open the "Configuration" tab and click on "Sensor Actuator Search".



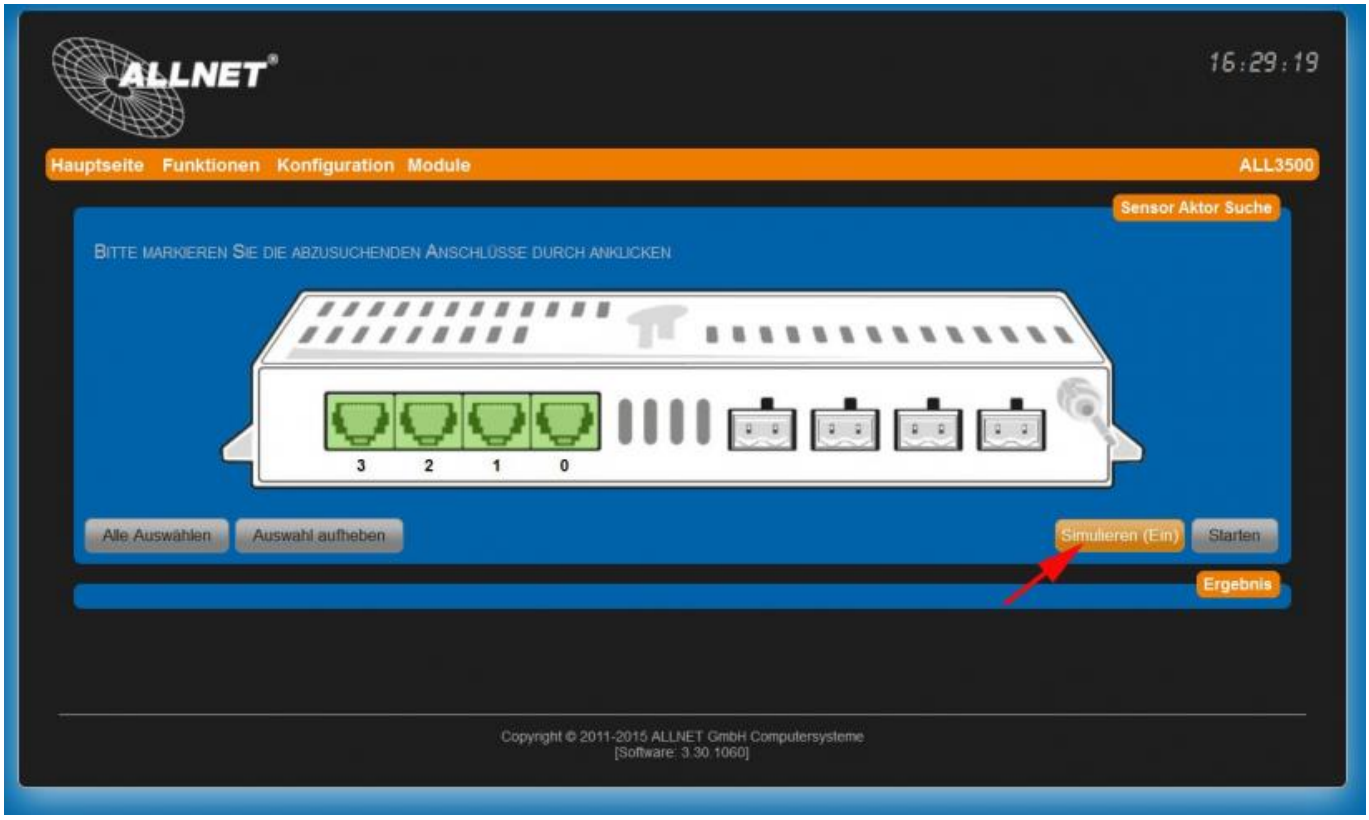
Step 2: For a new search, click on "Select all".



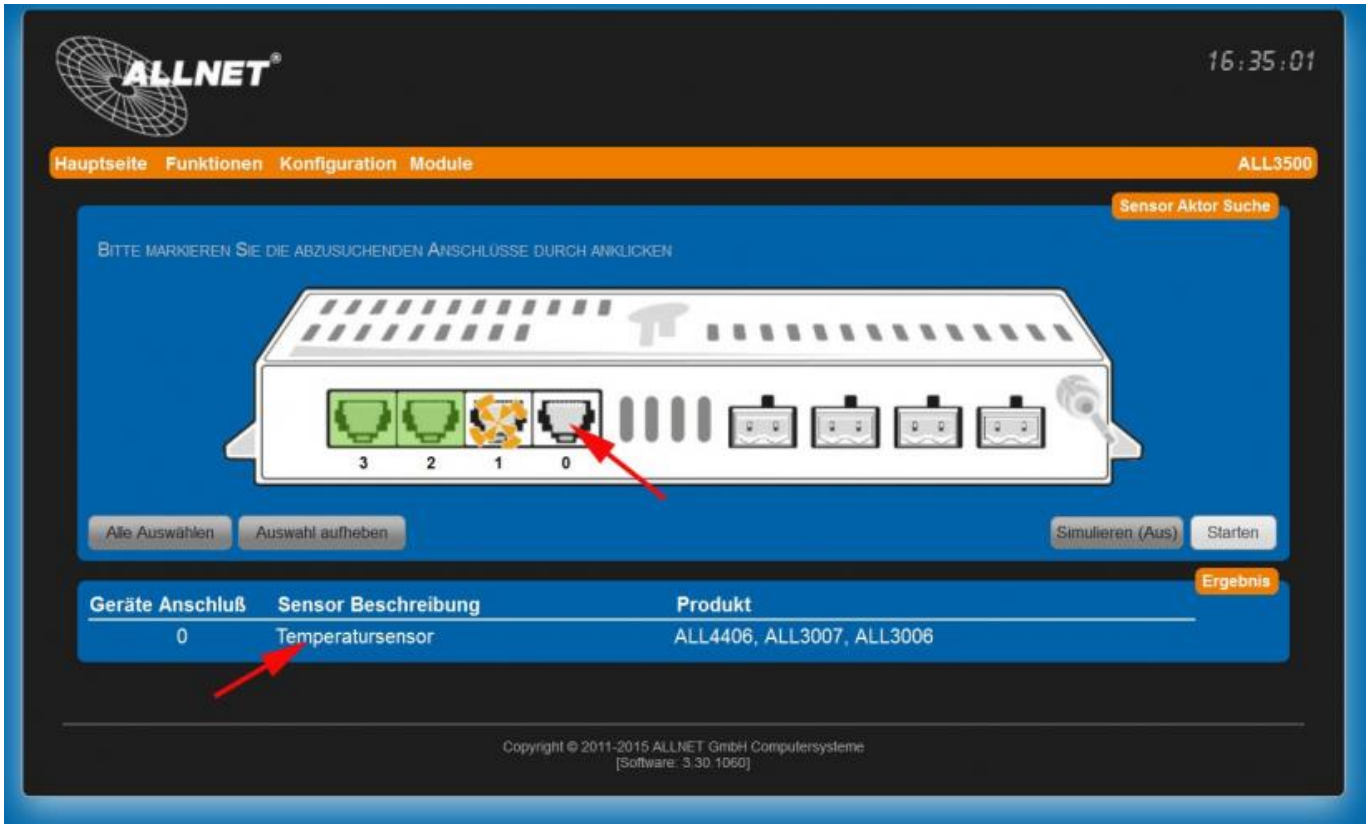
Or you know on which port and select port "0" by clicking on it, for example



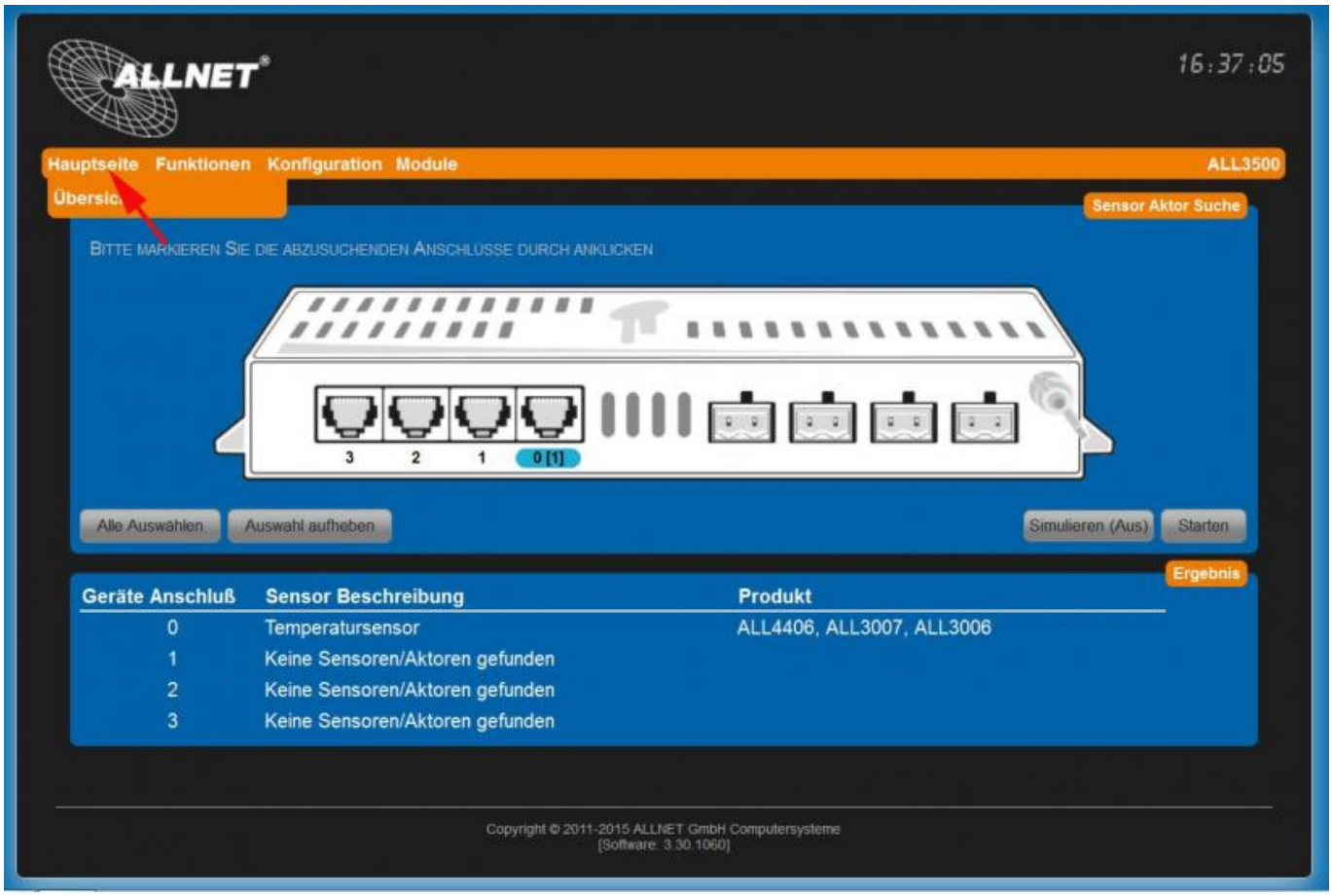
If you click "Simulate (On)", the sensor is not automatically created on the main page. In our case, we leave this function switched off.



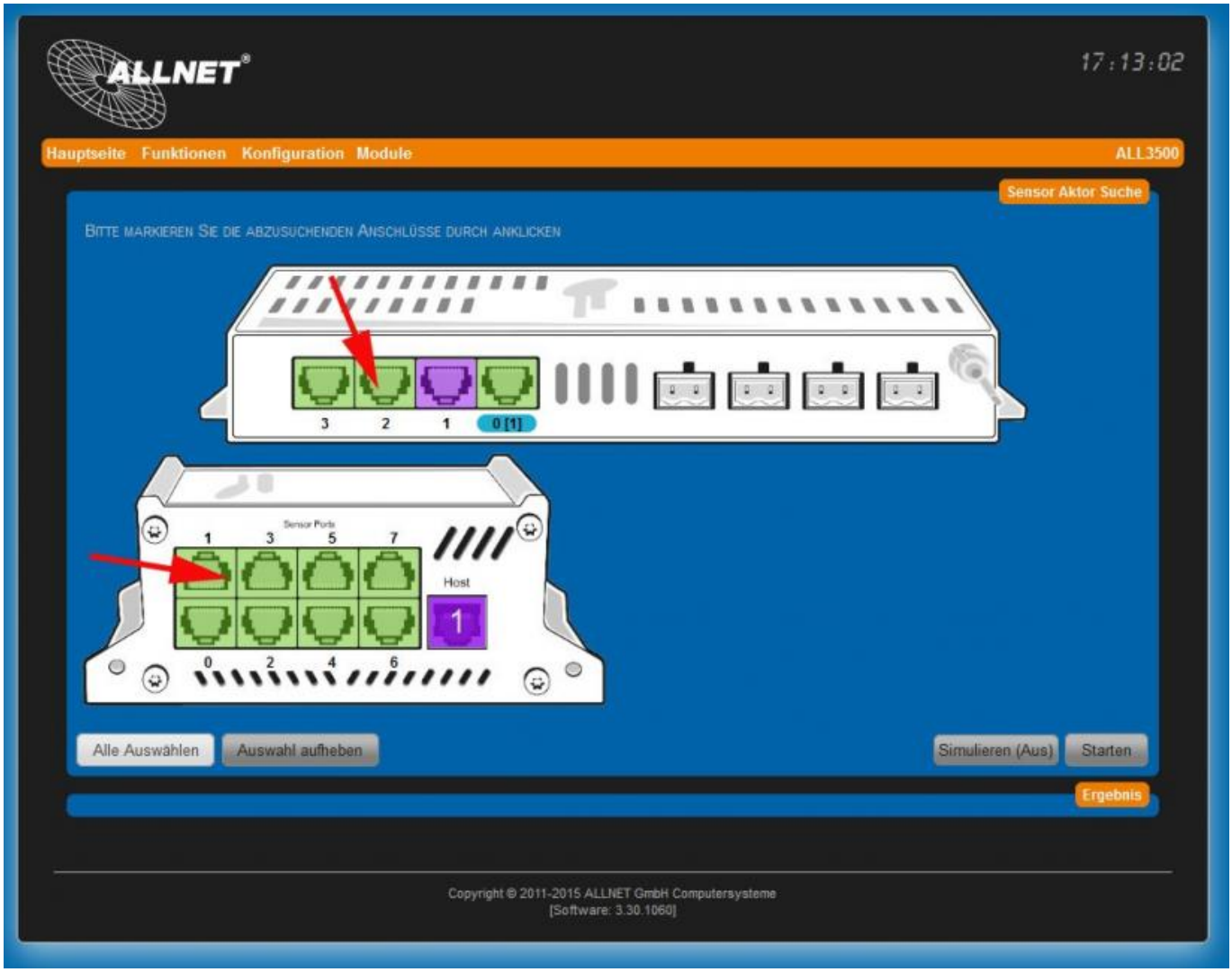
Step 3: Now click on "Start". The search is animated and the sensors found are displayed below.



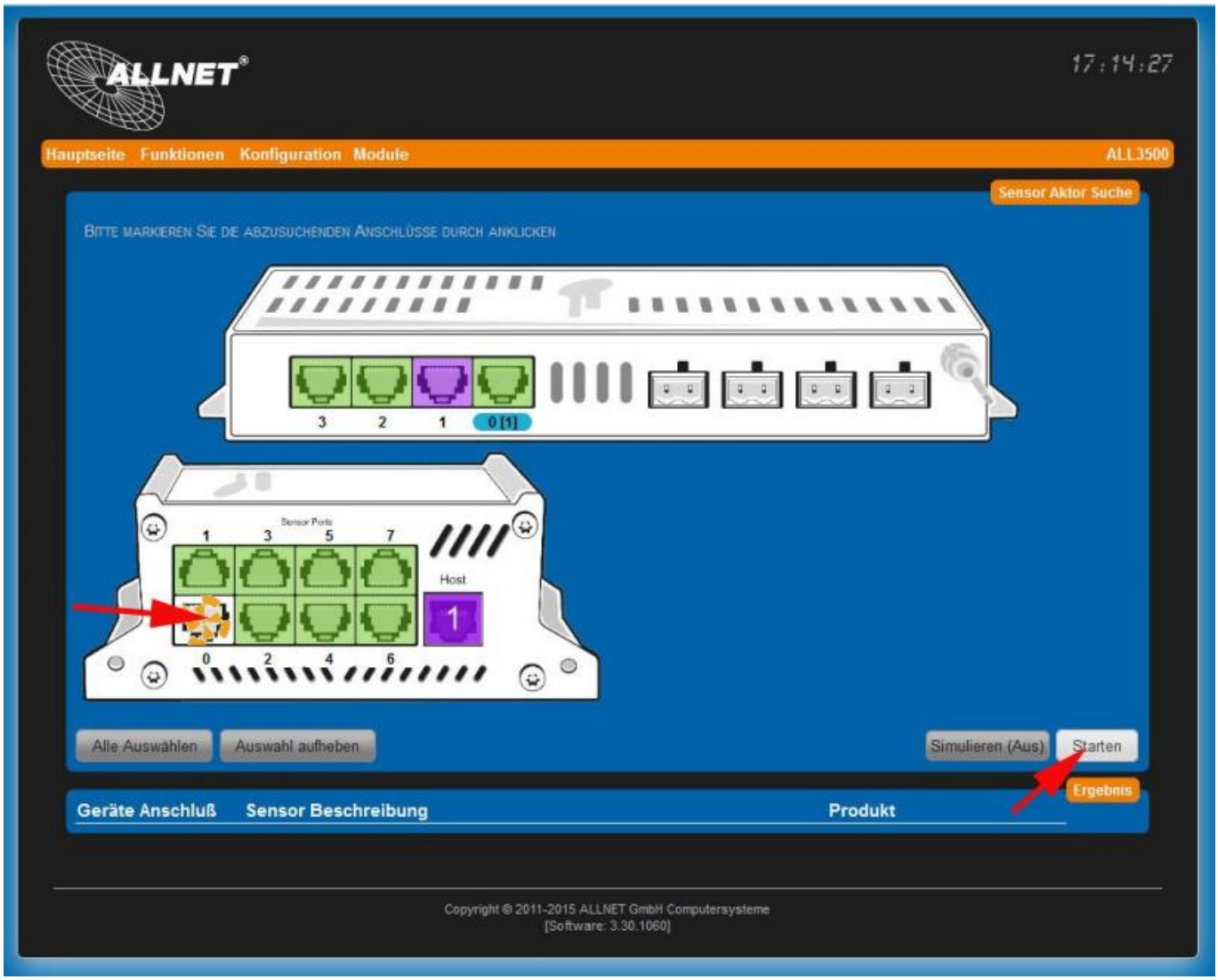
Step 4: Once the search has been successfully completed, click on "Overview" in the "Main page" tab.



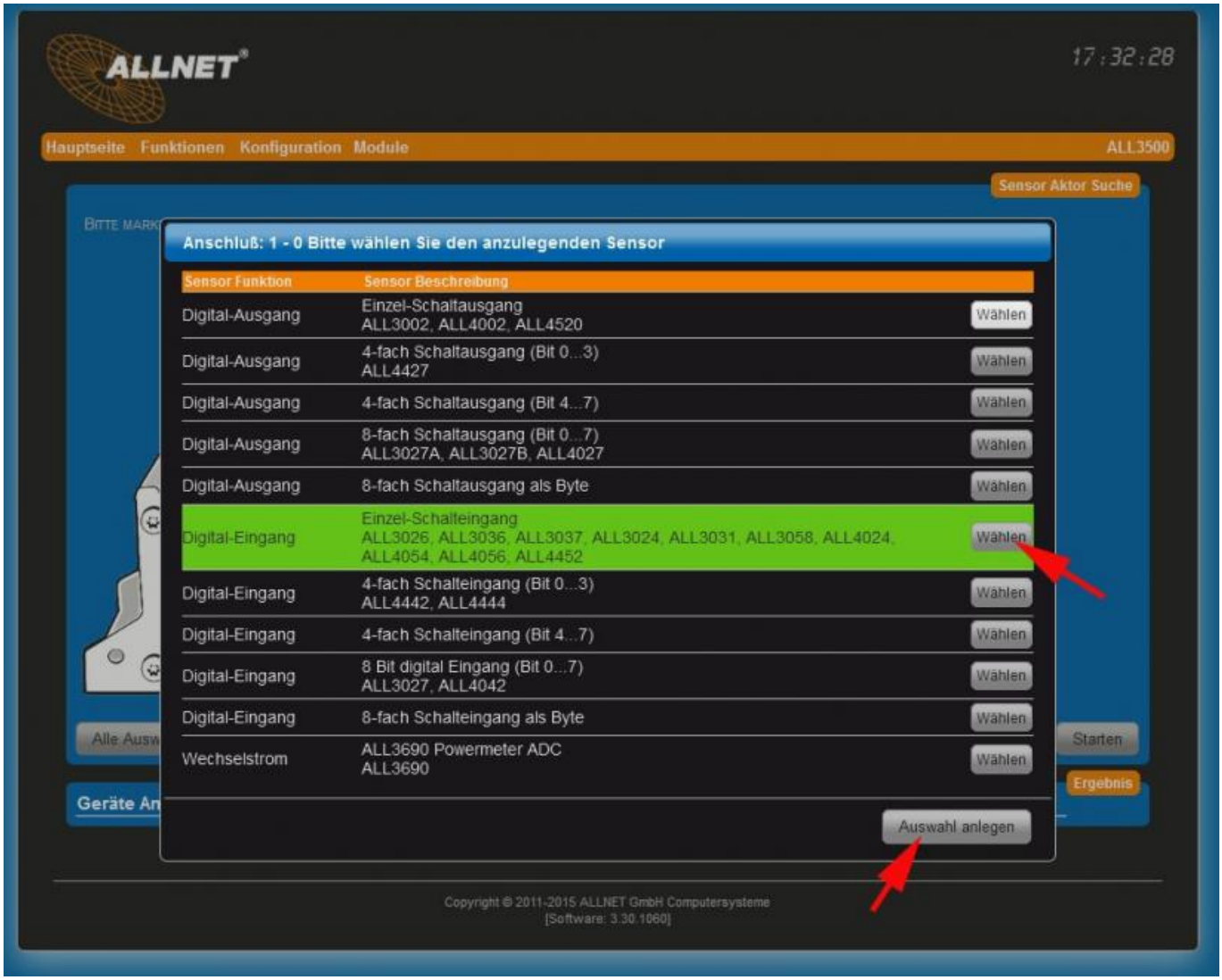
The sensor is now displayed on the main page and can be configured further.



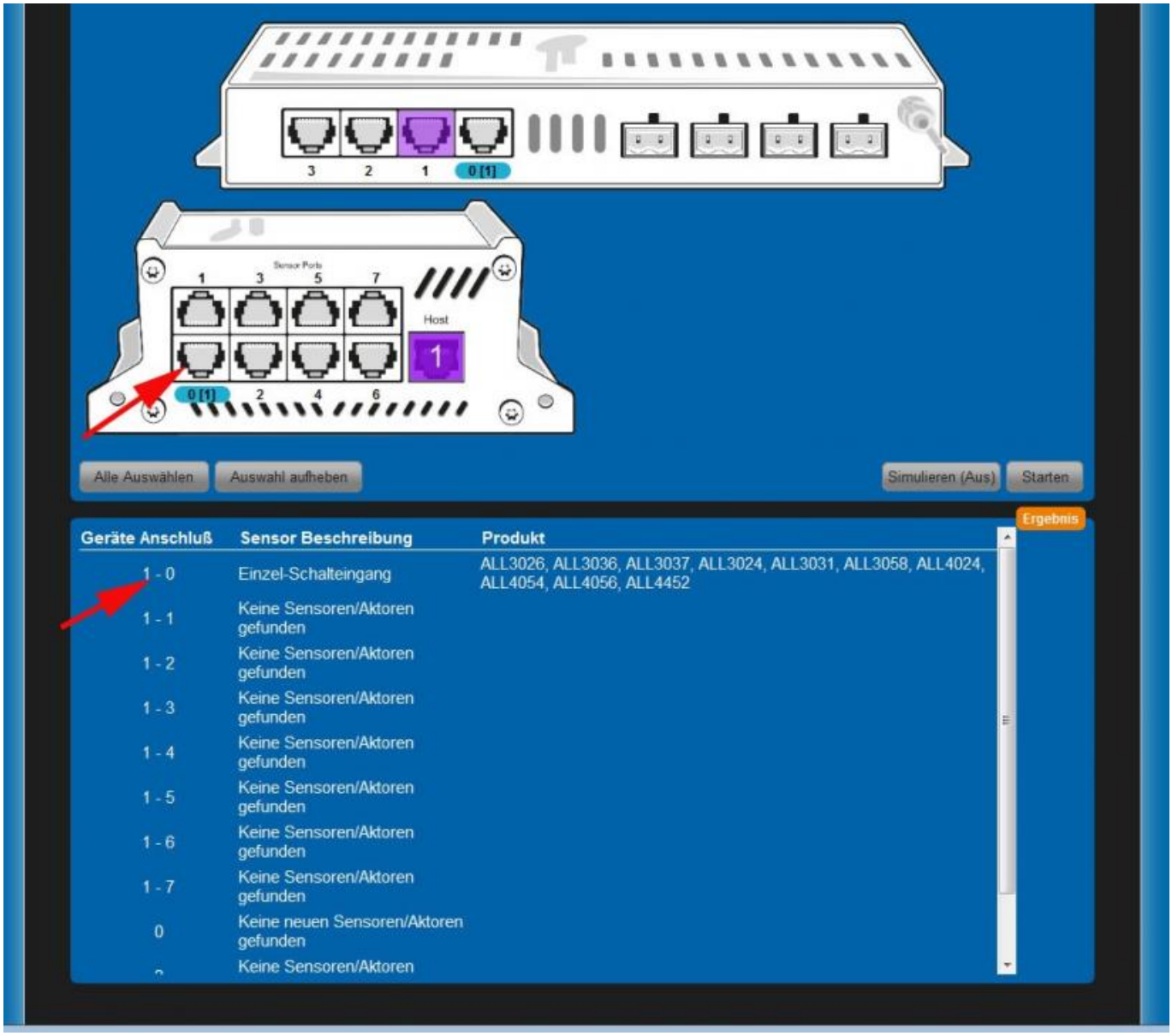
Use the same procedure when using a Multiplex "ALL4404 or ALL4504 "HUB". Repeat step 1 and go to "Select all".



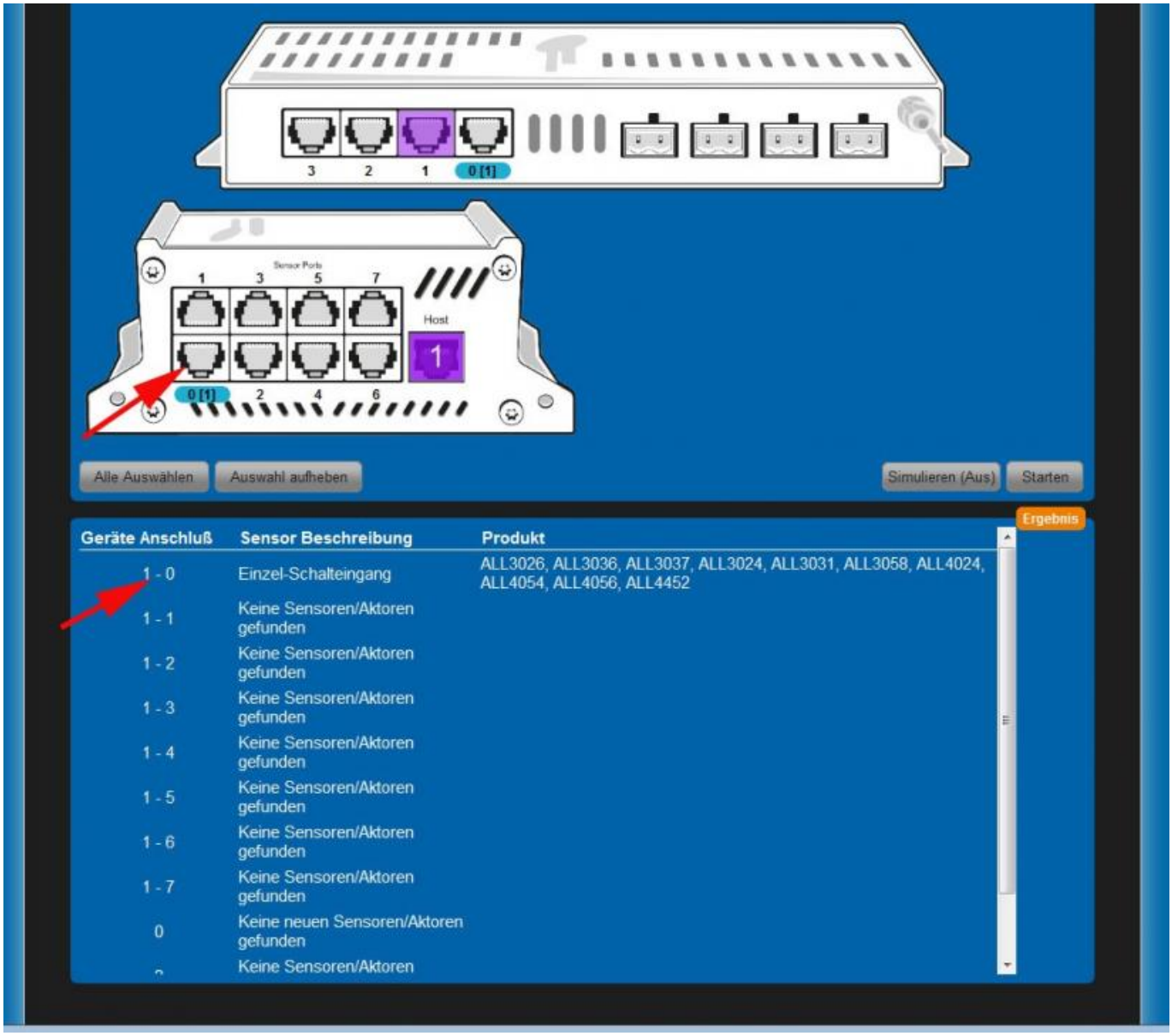
Step 5: We click on "Start" again and the search begins on all green ports.



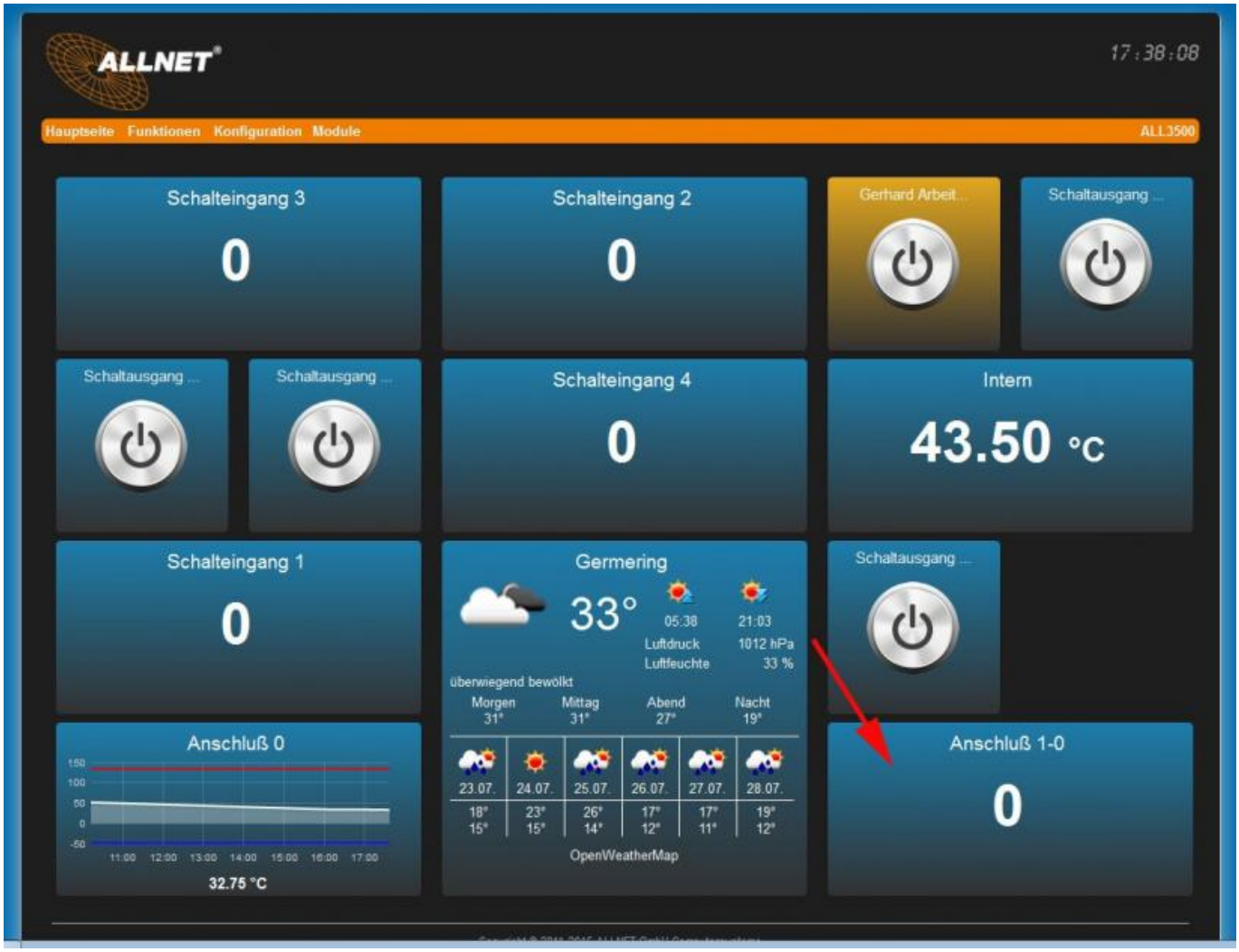
Step 6: In our case, a motion detector "ALL4452" is connected to the hub. This is a single switching input. Please click on "Select". The sensor field is marked "green". Then click on "Create selection".



The search is complete and the sensors found are located further down again



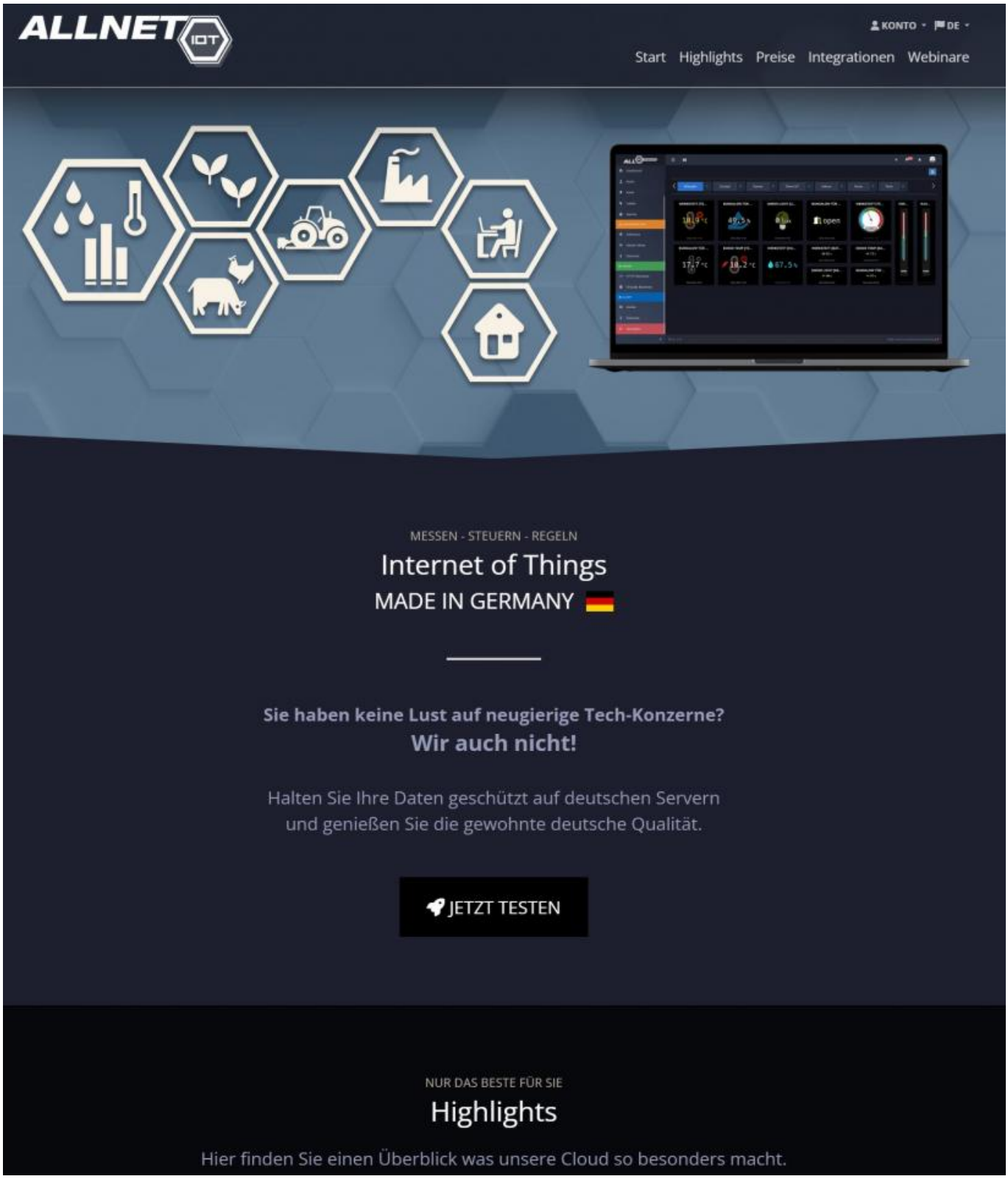
We click on "Overview" under the main page tab and see the sensor displayed. "0" means no movement and therefore no action. "1" means the sensor detects movement and could switch an actuator.


ALLNET
17:38:08
Hauptseite Funktionen Konfiguration Module
ALL3500
Schalteingang 3
0
Schalteingang 2
0
Gerhard Arbeit...
Schaltausgang ...
Schaltausgang ...
Schaltausgang ...
Schalteingang 4
0
Intern
43.50 °C
Schalteingang 1
0
Germering
33°
05:38
21:03
Luftdruck
1012 hPa
Luftfeuchte
33 %
überwiegend bewölkt
Morgen 31°
Mittag 31°
Abend 27°
Nacht 19°
23.07. 18° 15°
24.07. 23° 15°
25.07. 26° 14°
26.07. 17° 12°
27.07. 17° 11°
28.07. 19° 12°
OpenWeatherMap
Schaltausgang ...
Anschluß 0
150
100
50
0
-50
11:00 12:00 13:00 14:00 15:00 16:00 17:00
32.75 °C
Anschluß 1-0
0

ALLNETIOT - Cloud visualization

ALLNET IOT Cloud - The visualization for IoT!

Discover our ALLNET ioT Cloud. An end-to-end solution for visualizing your I&C devices, Lora devices or Shelly devices.



MSR Manual

[TOC]

Commissioning

Commissioning

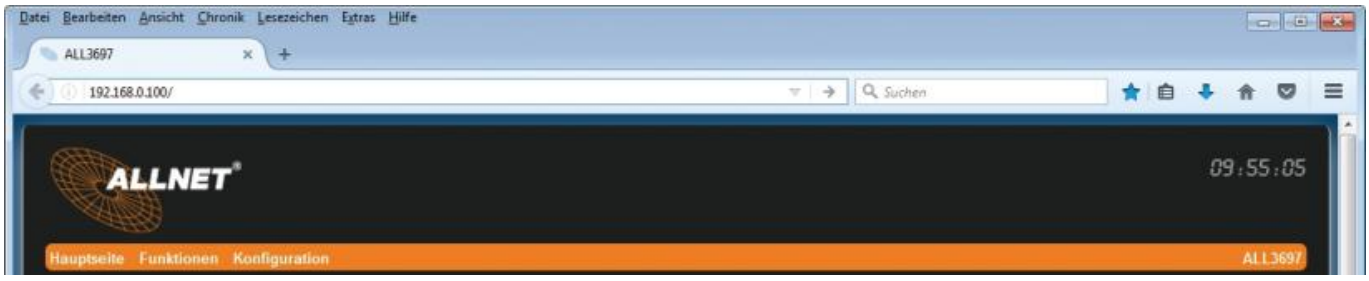
First connect the MSR device with the LAN cable and connect the 230 V mains voltage to ST5 using the supplied power supply unit or mating connector. Be sure to observe the safety instructions. The Linux system requires approx. 90 seconds for the boot process, during which time no activity can be carried out. Once the boot process is complete, the ACT LED starts to flash. The MSR device can then be accessed via the web interface.

Notes:

- Please use an up-to-date browser such as Microsoft Edge, Chrome or Firefox.
- After setting all network parameters, please run the "Update check" function (see the Configuration/Network settings section).
- Recommendation: Assign meaningful names in the web interface of your application after commissioning

Establish initial connection with LAN cable

1. connect your MSR appliance to your Ethernet switch using the LAN cable supplied. Make sure that the plugs click into place audibly.
2. establish a connection between the MSR device and the PC/MAC: The device communicates with the connected components using the TCP/IP protocol. In order for the MSR device to be recognized by your PC/MAC, the PC/MAC and the MSR device must be in the same network segment. The following applies as standard: IP address: 192.168.0.100 Subnet mask: 255.255.255.0



3. no user name or password required
4. please now place the PC or MAC temporarily on a free address between 192.168.0.1 and 192.168.0.254 (not 192.168.0.100, which is already pre-assigned by the device).
5. now enter the following in the web browser (Internet Explorer, Firefox...) address 192.168.0.100, the start page of the MSR device appears.
6. now continue with the LAN parameter settings. 7 After completing the LAN setting, we recommend performing an update check,
7. if you want a WLAN connection, please go to the Network settings entry on continue, otherwise you can skip this point.

8. if the device is to be used as a DHCP server, continue with the DHCP settings. This should only be carried out by experienced users.

Set up web interface

Set up web interface

The available sensors and actuators can be positioned and configured as required on the web interface under "Main page" > "Overview". The arrangement and color scheme is defined under "Configuration" > "Device settings".

! Note: Please always use the latest browser versions.

Hidden sensors

Hidden sensors and actuators can be shown again in the "Main page" > "Hidden sensors" menu. This option is only visible if sensors or actuators have been hidden.

Move sensor/actuator

The sensor and actuator tiles can be distributed across several display pages. Each page can be given a name that matches the topic. (See: "Configuration" > "Device settings").

Click on this symbol in the bottom left-hand corner of the sensor/actuator tile. This opens a menu with a selection of the pages that have already been configured.

Select the desired page.

Arrange sensor/actuator

! Note: To rearrange tiles within a display page, you must first click on the icon at the bottom left of the respective page to allow the tiles to be moved.

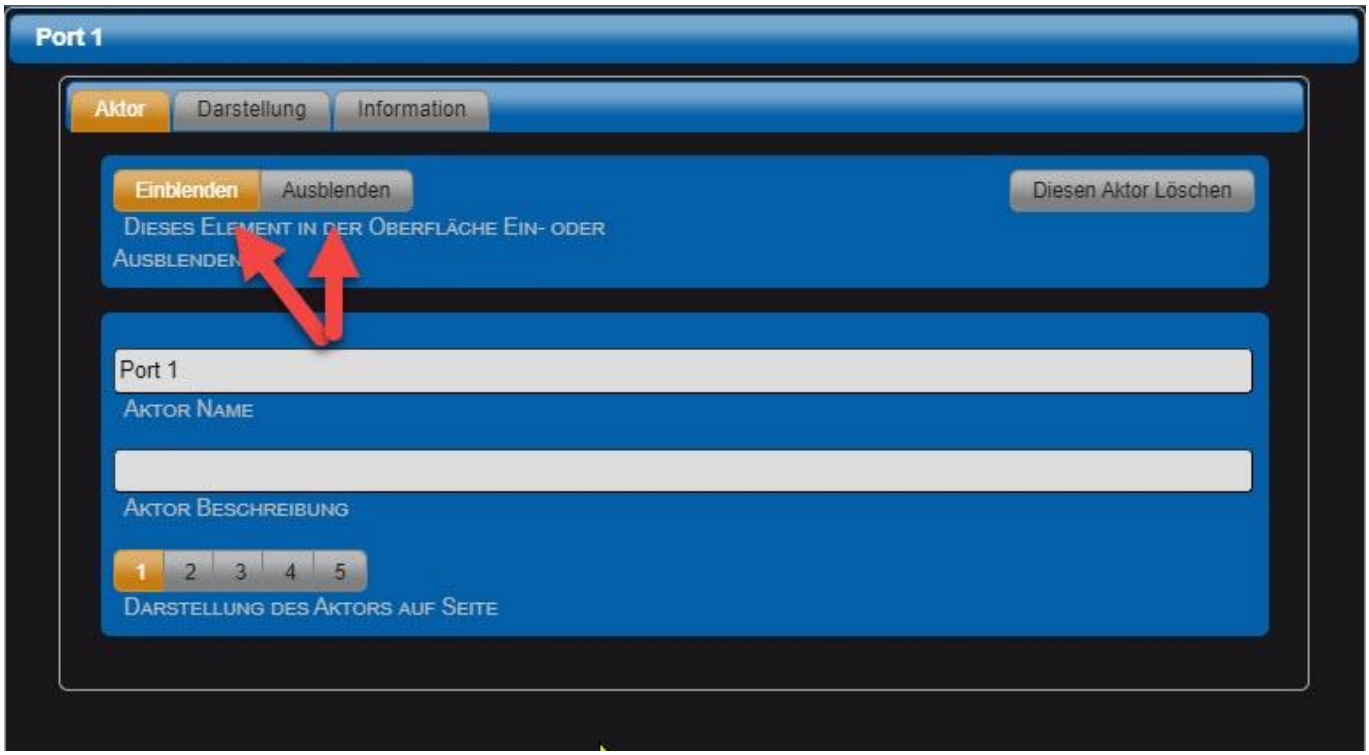
The sensor tile can be moved by clicking with the mouse in the area of the label.

! Note: Move the mouse to the height of the assigned name. When the move icon becomes visible, it can be moved to the desired position using drag & drop.

Configure actuator

Click the tool icon to configure a sensor.

"Actuator" tab



- Show or hide this element in the interface

Default = Show. If "Hide" is selected, the actuator no longer appears on the web interface. However, a logical evaluation of the signal is still possible. Hidden actuators can be shown again via the "Main page" > "Hidden sensors" menu.

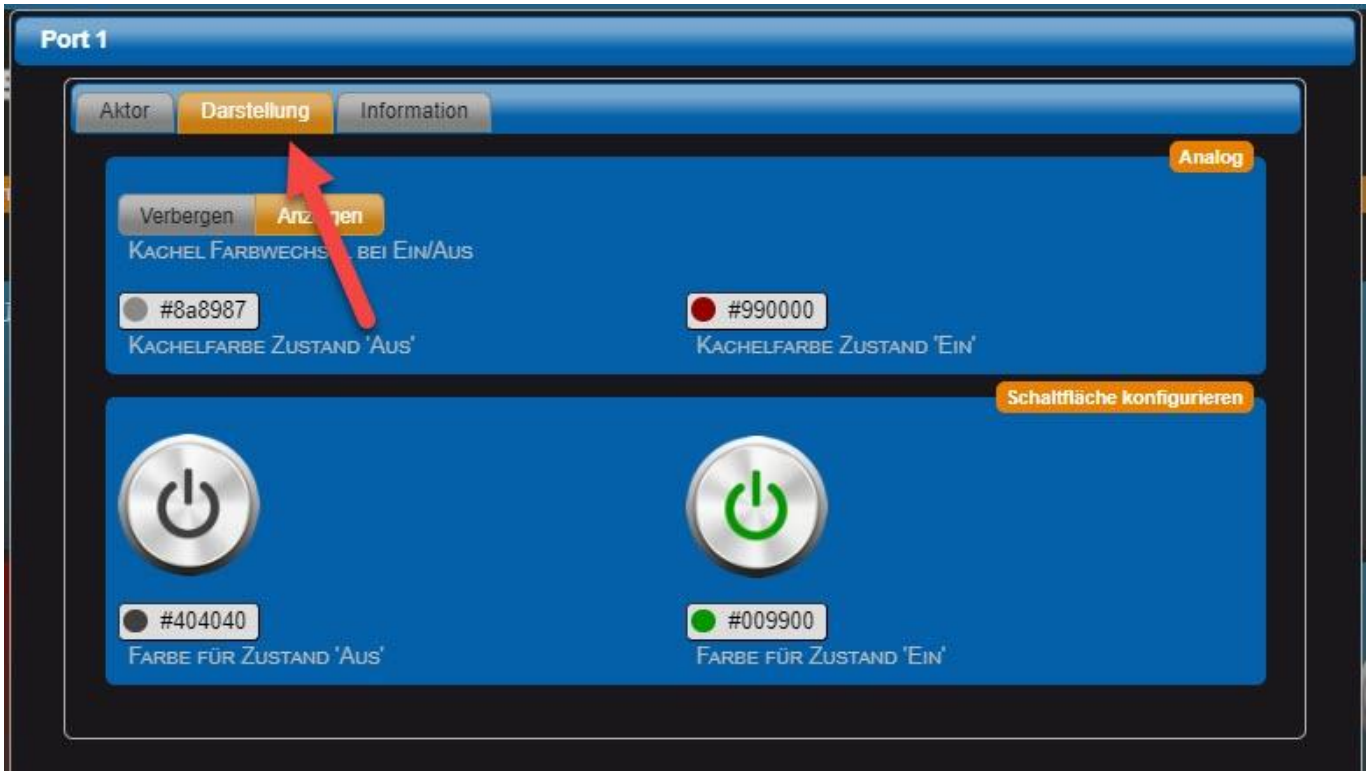
- Actuator name This name is displayed on the web interface. The length of the text field is limited to 20 characters.

- Actuator description The text is for information purposes only.

- Display of the actuator on page Selection of the display page for the actuator.

- Delete this actuator (only for remote actuators) You can use this button to delete the remote actuator.

"Display" tab



Tile color change on on/off The background color of the tile changes color depending on the following two parameters.

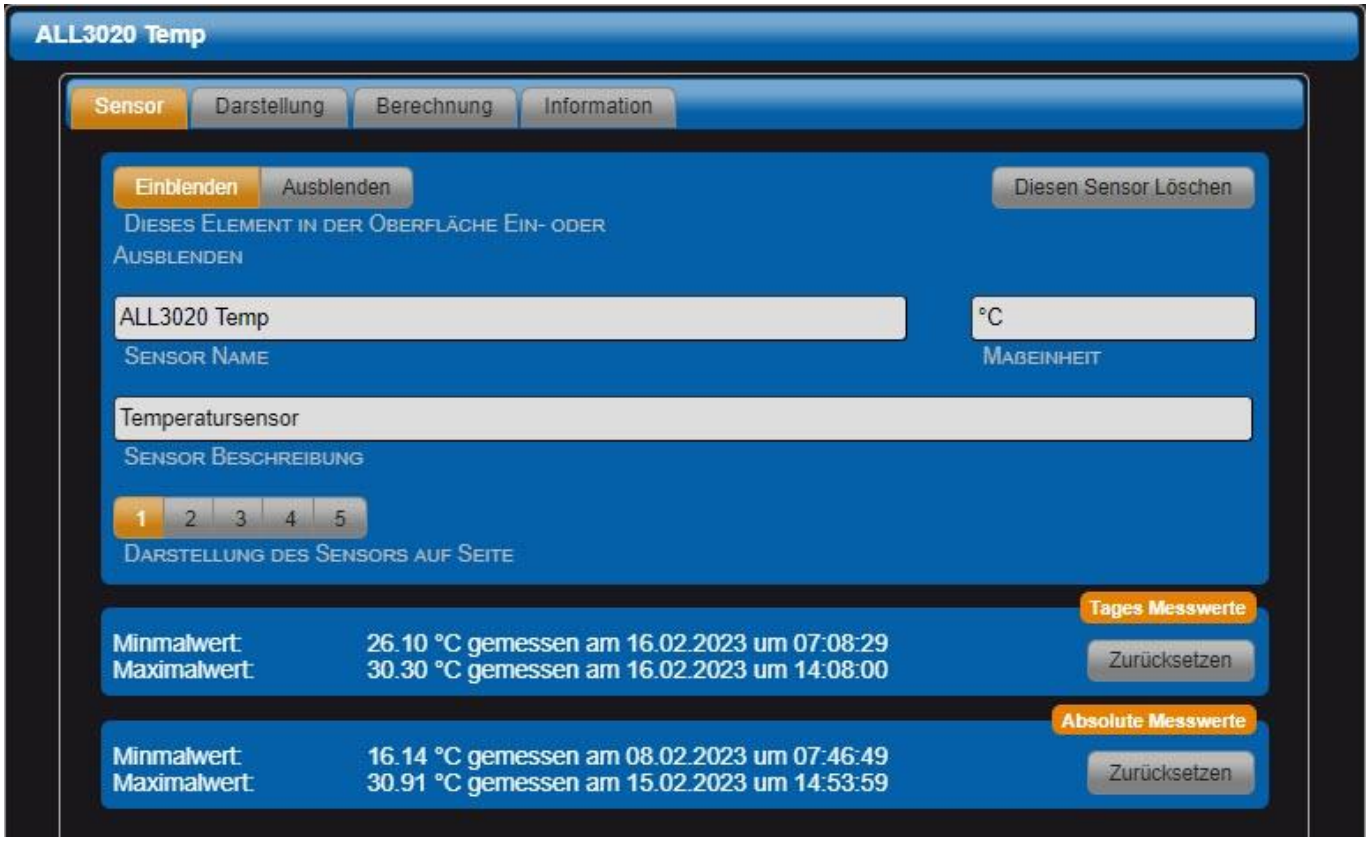
- Tile color State 'Off' Set the desired tile color using the color selector.
- Tile color state 'On' Set the desired tile color using the color selector.
- Color for 'Off' status Set the desired color for the button using the color selector.
- Color for state 'On' Set the desired color for the button using the color selector.

"Information" tab

! Note: This tab is only active in expert view. ! Output of system information via the actuator.

Configure sensor

"Sensor" tab



- Show or hide this element in the interface Default = Show. If "Hide" is selected, the sensor no longer appears on the web interface. However, a logical evaluation of the signal is still

possible. Hidden sensors can be shown again via the "Main page" > "Hidden sensors" menu.

- Sensor displays Default = Activated. If "Deactivated" is selected, the sensor no longer appears on the display page. Logical evaluation of the signal is still possible.

- Sensor name This name is displayed on the web interface. The length of the text field is limited to 20 characters.

- Measuring unit Physical unit to be displayed for this sensor.

- Sensor description The text is for information purposes only.

- Display of the sensor on page Selection of the display page for the sensor.

- Daily measured values Minimum value and maximum value on the current day.

- Absolute measured values Minimum value and maximum value over the entire recording period of the device.

- Delete this sensor (only for remote sensors) You can use this button to delete the remote sensor.

"Display" tab

Display of the sensor: There are three types of display:

Representation form "Instrument"

Display sensor value in text form.

- Select Display of the sensor

Here: Text.

- Minimum and maximum value

The min and max marks are shown in the display.

- Font size

Font size for text display. Default: 55.

- Sensor lower threshold value

Lower threshold value for sensor.

- Sensor upper threshold value

Upper threshold value for sensor.

- Tile color state 'Normal'

Set the desired color using the color selector.

- Tile color state 'Min'

Set the desired color using the color selector.

- Tile color state 'Min'

- Select the display of the sensor

Here: Instrument.

Representation form "Instrument"

sensor value in the form of an analog instrument.

! Note: If you hover over types 1 to 7 with the mouse, you can see what the types look like.

- Select Display of the sensor

Here: Instrument.

- Change color if above/below limit

The background color of the instrument changes when a threshold value is exceeded or not reached.

- Sensor lower threshold value

Lower threshold value for sensor.

- Sensor upper threshold value

Upper threshold value for sensor.

- Tile color state 'Normal'

Set the desired color using the color selector.

- Tile color state 'Min'

Display form "Diagram"

Display the sensor value in the form of a curve diagram.

- Select Display of the sensor

Here: Diagram.

- Height of the tile

Choice between single and double tile height.

- Change color if above/below limit

The background color of the instrument changes when a threshold value is exceeded or not reached.

- Sensor lower threshold value

Lower threshold value for sensor.

- Sensor upper threshold value

Upper threshold value for sensor.

- Tile color state 'Normal'

Set the desired color using the color selector.

- Tile color state 'Min'

Set the desired color using the color selector.

- Tile color condition 'Max'

Set the desired color using the color selector.

- Sensor display minimum value

Minimum value of the curve diagram.

- Sensor Display maximum value

Minimum value of the curve diagram.

- Select the color for the graph

Set the desired color using the color selector.

- Fill up to the axis

The representation is designed as an area.

- Lower threshold value

Default: Display. Color can be selected

- Upper threshold value

Default: Display. Color can be selected.

Set the desired color using the color selector.

- Tile color condition 'Max'

Set the desired color with the color selector

- Select the instrument type for the display

There are currently 7 types to choose from. (More may follow)

- Sensor display minimum value

Minimum value of the instrument display.

- Sensor Display maximum value

Minimum value of the instrument display.

- LCD for value display

In addition to the pointer display, the value is shown on an LCD display.

- Sections Markings

Show section markers. Default: Hide.

- Tile color condition 'Max'

Set the desired color with the color selector

"Calculation" tab

Note: This tab is only active in expert view.

By activating the calculation function, the sensor value can be scaled or provided with an offset. The term can be composed of a maximum of two additions and two multiplications. The calculations only work with sensors that were recorded via the I2C port. This means that no power meter readings or readings imported from other devices can be calculated. Alternatively, you can create a clone of measured values that cannot be included directly in the calculation (see "Duplicate sensor" function in the "Functions" > "Virtual sensors" menu > "+" button). This virtual sensor can then be used for the calculation.

- Activate / deactivate calculation function Default = Deactivated. Only measured values from

sensors via I2C port and virtual sensors can be used. New value = (((sensor value + addition 1) *multiplication 1) + addition 2)* multiplication 2

- Addition 1 Summand for first addition. Default = 0.
- Multiplication 1 Multiplier for first multiplication. Default = 1.
- Addition 2 Summand for second addition. Default = 0
- Multiplication 2 Multiplier for second multiplication. Default = 1.
- Calculate average value over measured values [Switched off] Number of measured values to be averaged. Default = 0 (no average calculation).

"Information" tab

Note: This tab is only active in expert view.

Output of system information about the sensor, e.g. which chip ID the sensor uses and whether it is a native sensor or remote sensor.

History of the sensor data

Click on the curve symbol at the bottom left of the sensor tile to open the curve display. For each sensor, the measured values of the last 72 hours can be displayed separately by day (today, yesterday, the day before yesterday) and thus easily compared with each other.

- Today / Yesterday / The day before yesterday Click on the respective button to show or hide the curves for the individual days.
- Auto-scaling By clicking on the "Auto scaling" button, the scaling is based on the minimum and maximum values actually measured. Clicking it again reactivates normal scaling, i.e. the alignment is based on the upper and lower display limits.
- Double click on graphic By double-clicking on the graph, the display period shown in the diagram is shortened with each double-click. The display area can be moved with the mouse pointer and the left mouse button pressed.
- Mouse pointer on curve If the mouse pointer is moved over individual curve points, the respective value appears in detail in a text field.

Quick Installation Guide

Quick Installation Guides

[TOC]

ALL3697

ALL3697

Content

all3697 qig de (PDF, 1.05 MB)

ALL3419

ALL3419

all3419v3 qig de (PDF, 4.47 MB)

all3419v3 qig en (PDF, 4.29 MB)

ALL3500

ALL3500

Content

all3500v2 qig de (PDF, 4.63 MB)

all3500v2 qig en (PDF, 4.41 MB)

ALL3505

ALL3505

all3505 handbuch version en 1 (PDF, 1.89 MB)

all3505 handbuch a6 (PDF, 14.70 MB)

ALL5000v2

ALL5000v2

all5000v2 qig de (PDF, 3.83 MB)

all5000v2 qig en (PDF, 3.70 MB)

ALL3692

ALL3692

handbuch all3692 de (PDF, 1.73 MB)

ALL3696

ALL3696

Content

all3696 qig de (PDF, 4.62 MB)

all3696 qig en (PDF, 4.41 MB)

ALL3073

ALL3073

Content

all3073v3wlan qig de (PDF, 1,012.23 KB)

all3073v3wlan qig en (PDF, 1.00 MB)

ALL3420

ALL3420

Content

all3420 qig de (PDF, 4.30 MB)

ALL4176

ALL4176

Content

all4176 qig de (PDF, 4.42 MB)

all4176 qig en (PDF, 4.30 MB)

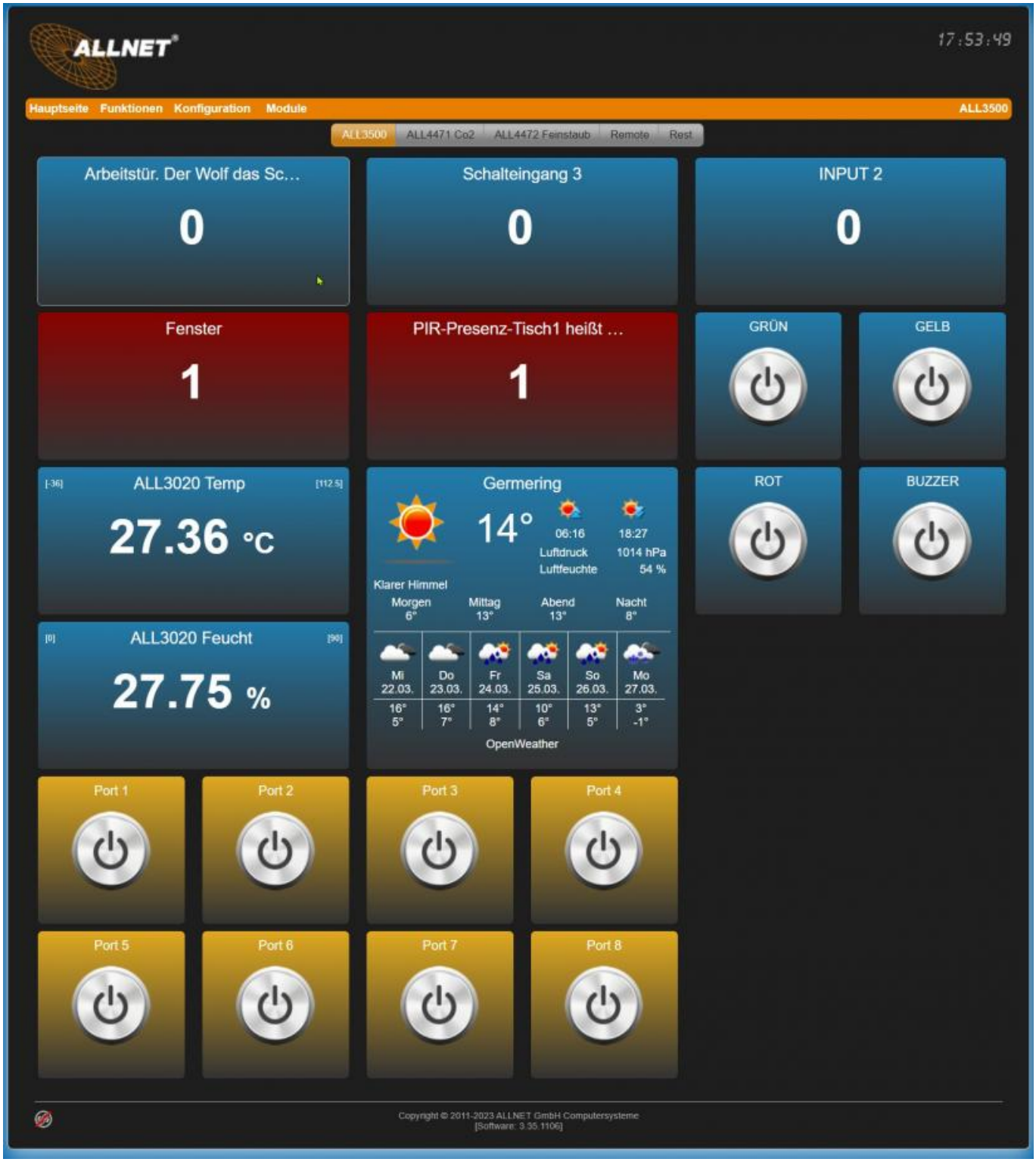
Manual for technicians

Content

Main page

Overview

On the main page you will find the web interface with the displays of the sensors and the operating elements for controlling the actuators/outputs. The distribution and arrangement of the sensors/actuators on several pages (tabs) can be customized. These are preconfigured and can be changed or deleted. You can also create several main pages to get a better overview, e.g. 1st floor, 2nd floor, etc.


ALLNET
17:53:49
Hauptseite Funktionen Konfiguration Module
ALL3500
ALL3500 ALL4471 Co2 ALL4472 Feinstaub Remote Rest
Arbeitstür. Der Wolf das Sc…
0
Schalteingang 3
0
INPUT 2
0
Fenster
1
PIR-Presenz-Tisch1 heißt …
1
GRÜN
GELB
[-36] ALL3020 Temp [112.5]
27.36 °C
Germering
14°
06:16
18:27
Luftdruck 1014 hPa
Luftfeuchte 54 %
Klarer Himmel
Morgen 6°
Mittag 13°
Abend 13°
Nacht 8°
Mi 22.03. 16° 5°
Do 23.03. 16° 7°
Fr 24.03. 14° 8°
Sa 25.03. 10° 6°
So 26.03. 13° 5°
Mo 27.03. 3° -1°
OpenWeather
ROT
BUZZER
[0] ALL3020 Feucht [90]
27.75 %
Port 1
Port 2
Port 3
Port 4
Port 5
Port 6
Port 7
Port 8
Copyright © 2011-2023 ALLNET GmbH Computersysteme
[Software: 3.35.1106]

Overview table

Overview table

Under "Main page" > "Overview table" you will find a list of all the parameters provided by the device with current and saved values.

- Refresh (sec)

Here you can enter the update rate at which the values are to be updated. Confirm with the "SET" button.

- Meaning of the columns:

Spalte	Kurzbeschreibung
ID	ID zur Identifizierung des Parameters
NAME	Name des Parameters
VALUE	Aktueller Wert, wird in Abhängigkeit von der Einstellung "Refresh (sek)" aktualisiert
UNIT	Physikalische Einheit des jeweiligen Werts
CST MIN	Benutzerdefinierter unterer Schwellenwert
CST MAX	Benutzerdefinierter oberer Schwellenwert
TDY MIN	Tages-Minimalwert
TDY MAX	Tages-Maximalwert
ABS MIN	Absoluter Minimalwert seit dem letzten Geräte-Reset
ABS MAX	Absoluter Maximalwert seit dem letzten Geräte-Reset
ERROR	Evtl. Fehlercode ("0" bedeutet kein Fehler)

Übersicht

2 SET

Refresh (sek)

ID	NAME	VALUE	UNIT	CST MIN	CST MAX	TDY MIN	TDY MAX	ABS MIN	ABS MAX	ERROR
1	Intern	48.00	°C	-49.5	135	43.87	48.06	19.62	255.93	0
2	Arbeitstür. Der Wolf …	0				0.00	0.00	0.00	1.00	0
3	INPUT 2	0				0.00	0.00	0.00	0.00	0
4	Schalteingang 3	0				0.00	0.00	0.00	1.00	0
5	Fenster	1				1.00	1.00	0.00	1.00	0
6	GRÜN	0								0
7	ROT	0								0
8	GELB	0								0
9	BUZZER	0								0
96	Germering hpa	1039.00	hpa	-50	50	1035.00	1039.00	990.00	1073.00	0
130	3 ALL4472 Massenkonz.…	4.09	µg/m³	0	900	2.33	6.09	-10000.00	44.93	0
131	3 ALL4472 Massenkonz.…	4.21	µg/m³	0	900	2.41	6.28	0.00	87.62	0
132	3 ALL4472 Massenkonz.…	4.21	µg/m³	0	900	2.41	6.28	0.00	125.13	0
133	3 ALL4472 Massenkonz.…	4.21	µg/m³	0	900	2.41	6.28	0.00	133.44	0
134	3 Num. Konzentr. PM0.5	30.57	pt./cm³	0	2700	17.51	45.57	-10000.00	306.72	0
135	3 ALL4472 Num. Konzen…	34.72	pt./cm³	0	2700	19.89	52.21	-10000.00	373.32	0
136	3 ALL4472 Num. Konzen…	34.81	pt./cm³	0	2700	19.94	52.34	-10000.00	378.57	0
137	3 ALL4472 Num. Konzen…	34.81	pt./cm³	0	2700	19.94	52.34	-10000.00	379.17	0
138	3 ALL4472 Num. Konzen…	34.81	pt./cm³	0	2700	19.94	52.34	-10000.00	379.27	0
139	3 ALL4472 Typische Pa…	0.48	µm	0	13.5	0.43	0.52	0.38	1.40	0
162	Tablet Gerhard	0.00		-1800000	1800000	0.00	4.00	0.00	140461.00	0
166	PIR-Presenz-Tisch1 he…	0				0.00	1.00	0.00	1.00	0

Evaluation

Evaluation

Setting options under "Functions" > "Evaluation". The values from sensors can be evaluated and displayed.

Period from... to...

Either use the pull-down menu to choose between "Yesterday", "Today", "Week", "Month" or enter a period with a start date ("From") and end date ("To").

* **Recording selection**

If recording has been activated under "Functions" > "Recording", a pull-down menu for selecting the

desired recording type appears at the top right.

- **Show**

The "Display" button loads the data as specified.

- **Reset**

The "Reset" button updates the loaded data and resets the zoom.

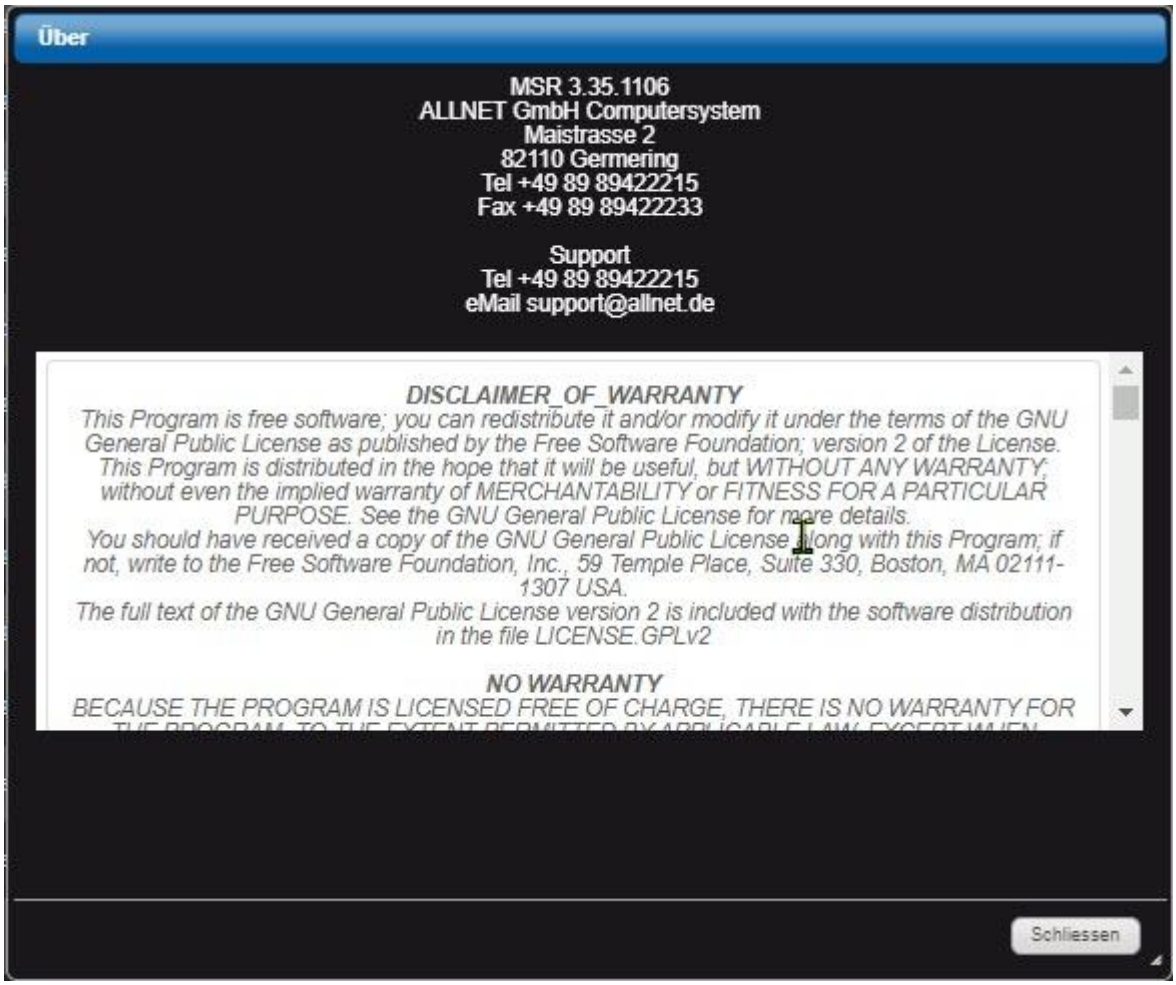
Show/hide curves

If several curves are recorded, you can use the buttons on the left below the graph to show/hide individual curves.

About

About

Under "Main page" > "About" you will find the firmware version of your device, contact information and the text of the GPL license.



Functions

Functions

[TOC]

Under Functions you will find everything to do with control, monitoring and supervision. This includes the following points:

ALLNET remote devices - Remote control and integration of other MSR devices

External actuators -

Virtual sensors - Create rules or formulas as sensors e.g. watt calculation

Actions - e.g. alarm messages, comparisons, email notifications, status notifications

Time control - Timers for switching actuators can be defined here

Monitoring - Watchdog functions can be added here. Ping loss of IP addresses

Recording - Record sensor values at intervals to export them later.

Mobotix Cameras - Plugin for Mobotix cameras, here values can be visualized in the camera

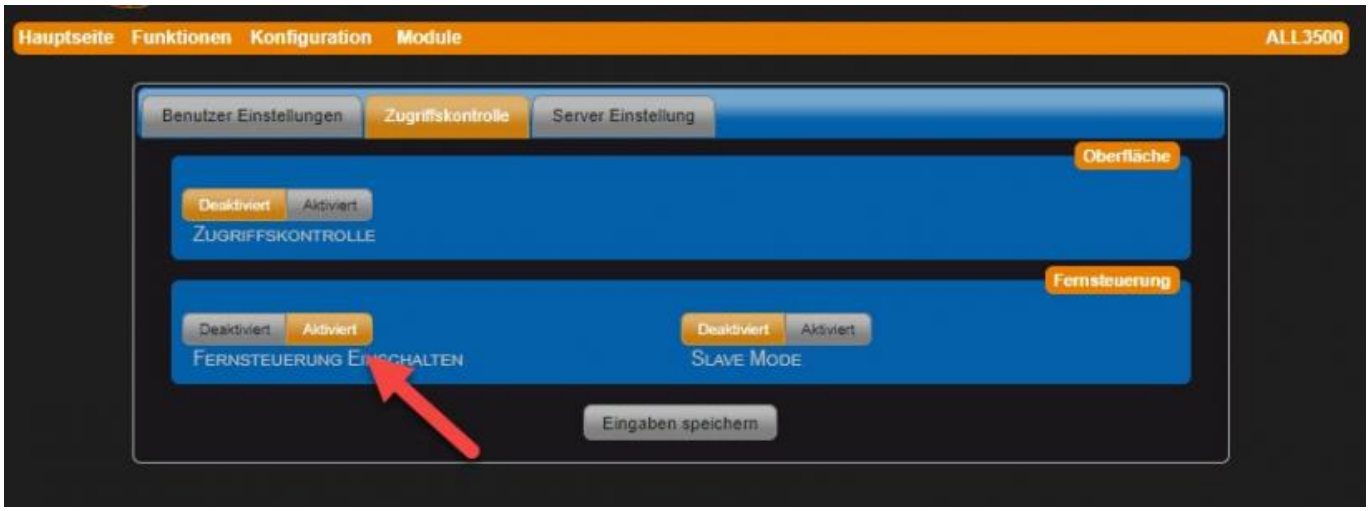
ALLNET remote devices

ALLNET remote devices

Setting options under "Functions" > "ALLNET remote devices". Here it is possible to integrate other ALLNET sensor/actuator modules into the web interface of the device. A remote device can be recognized by the green "Mouse over" marker. After a successful import, a tile is created on the web interface (main page) for each imported sensor value and actuator.

User rights can be set up separately for administrator and user.

! Note: A prerequisite for a successful device search is the activation of remote control in the remote device. This setting can be found in the menu (of the remote device) under "Configuration" > "Server and user" and there in the "Access control" tab. Activate the Enable remote control parameter (see following figure):

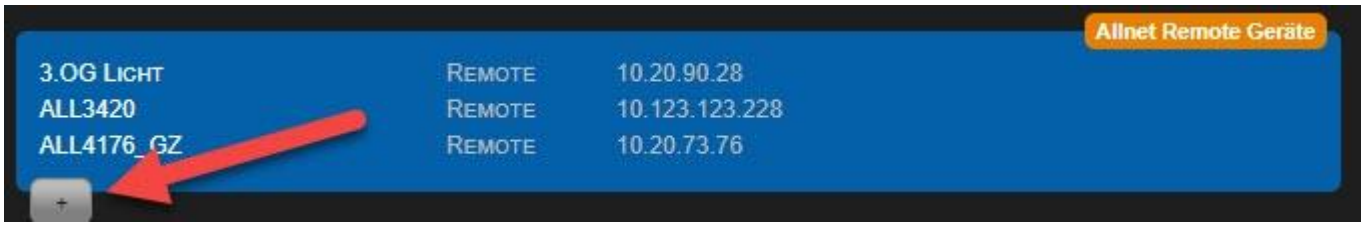


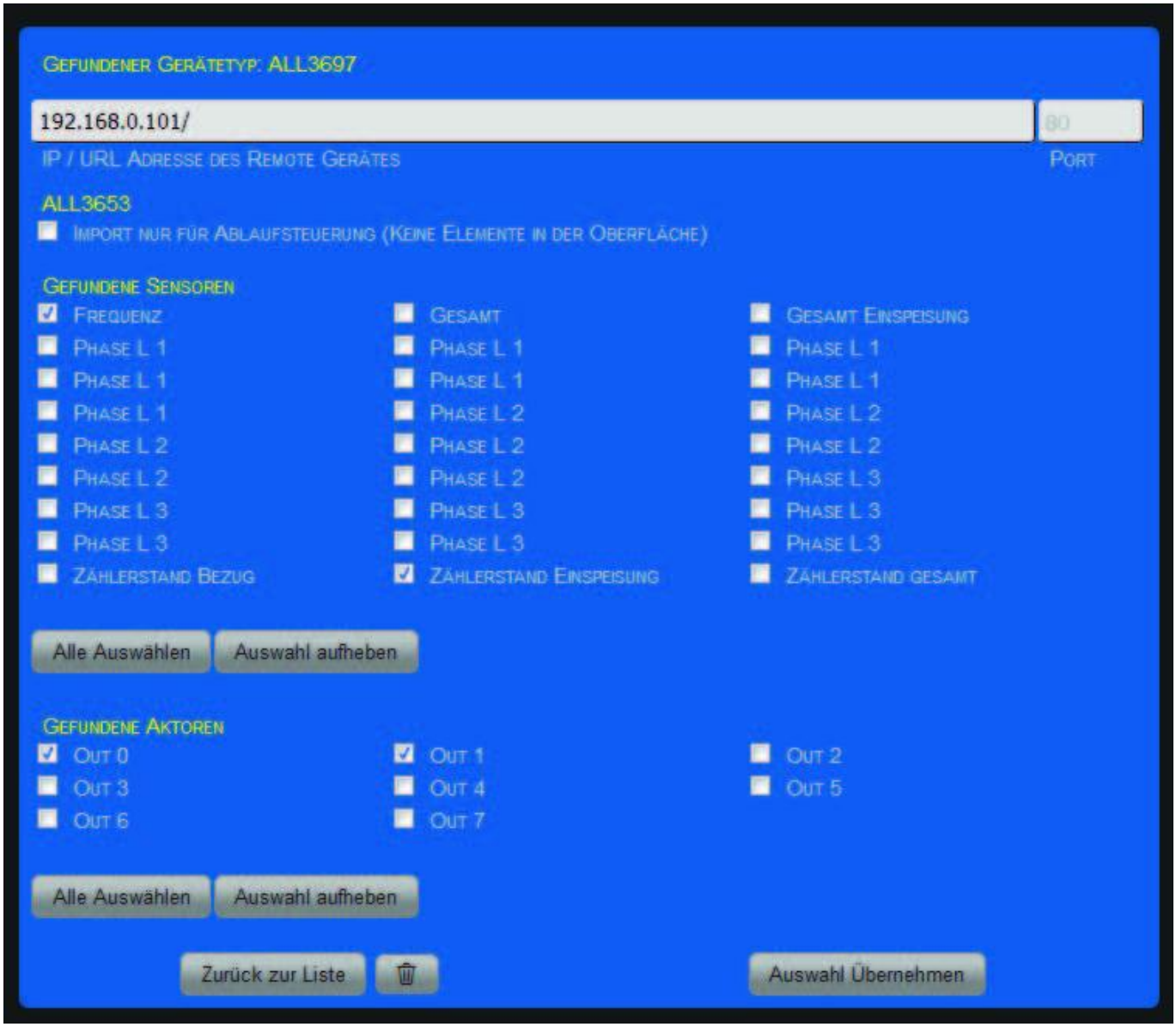
Add remote devices

Press the "+" button to integrate a sensor/actuator module

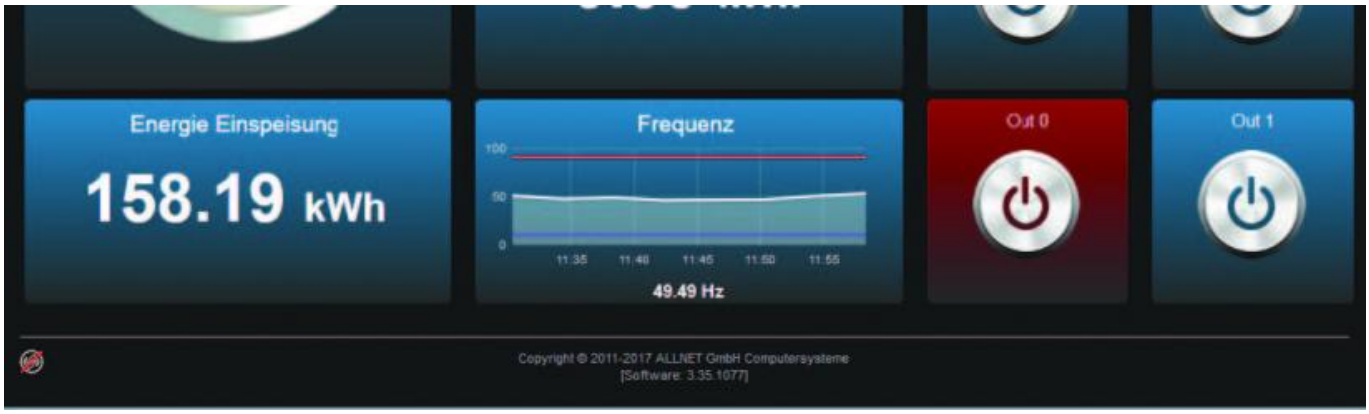
Click "Check" to start the search for remote devices via IP address or URL.

After a successful search, a window opens with all sensors and actuators that can be integrated (example: ALL3697).





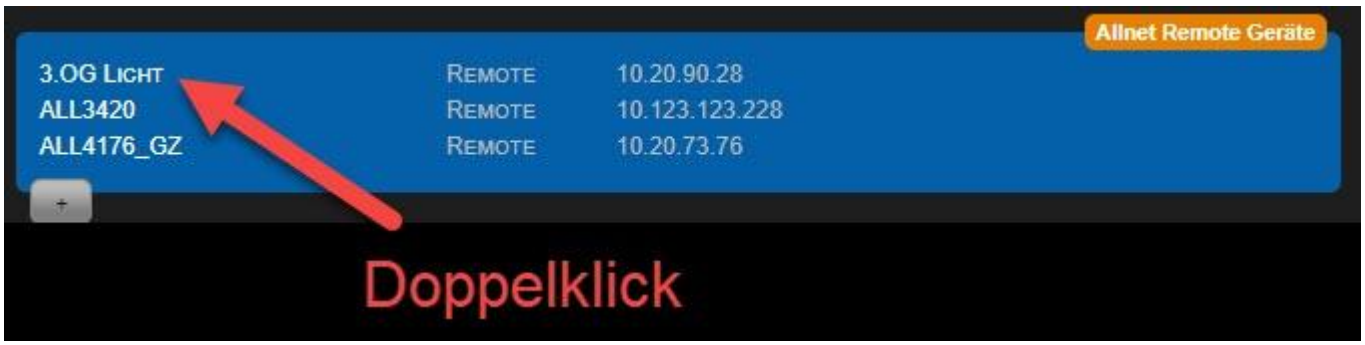
In the example, the sensors "Frequency" and "Meter reading feed-in" have been selected as well as the actuators "OUT 0" and "OUT 1". Confirm with "Accept selection" to add the tiles to the main page of your web interface (see following figure).



! Note: To move tiles, you must first click on the icon at the bottom left to allow moving.

Change/delete configuration

As soon as you have added external sensor/actuator modules, they are listed with the device name of the remote device. The configuration of the remote device can be changed by double-clicking the respective line. Click on "Check" to call up the configuration page. The procedure described in "Adding remote devices" applies.



If you want to delete the remote device, click on the trash can icon.

External actuators

External actuators

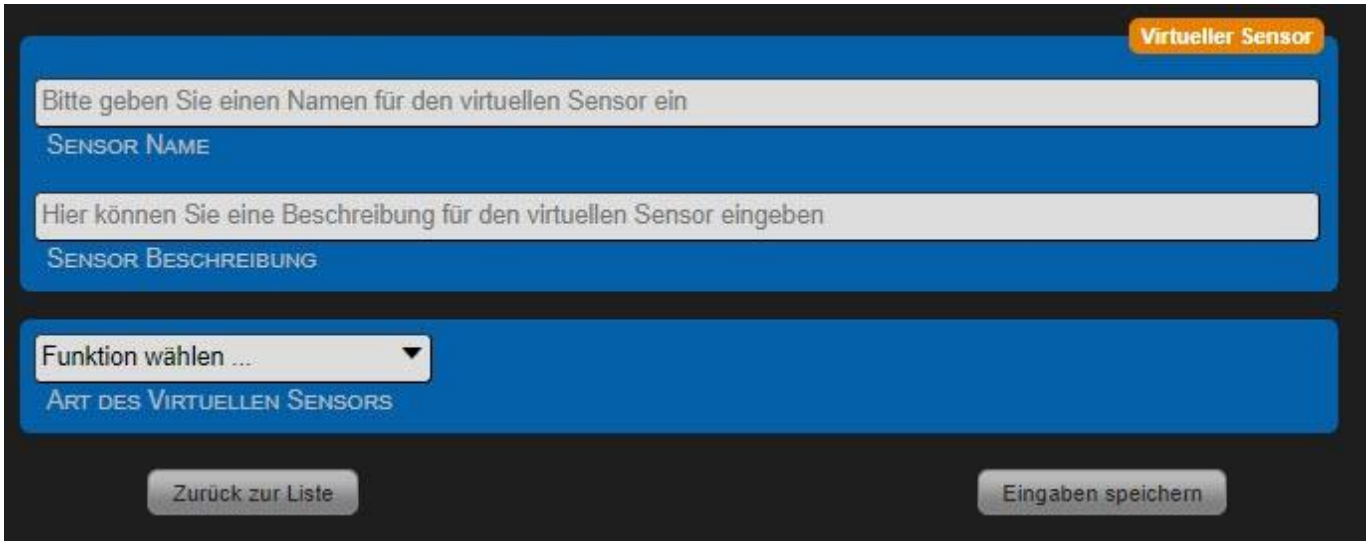
Older devices such as a 3075 or Plugwise can be integrated under external actuators. However, these are no longer available from us. That is why we no longer go into this function.

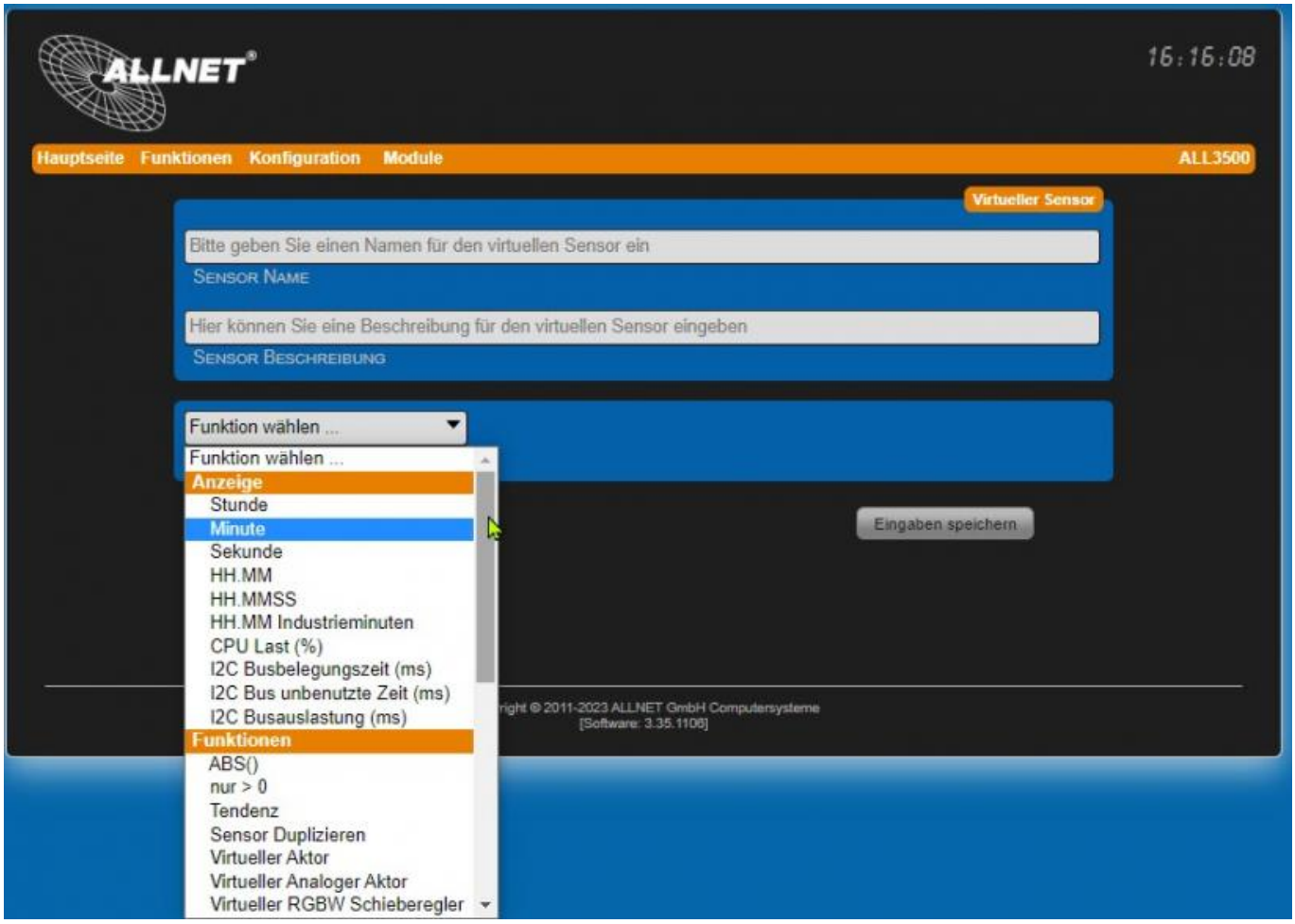
Virtual sensors

Virtual sensors

Setting options under "Functions" > "Virtual sensors". Virtual sensors provide a wide range of options for displaying values. The outputs of several sensors can also be combined. Virtual sensors can have the function of variables. Complex control networks can thus be set up. The result of a virtual sensor is displayed on the main page in the same way as a "real" sensor. The visual output on the web interface can also be suppressed, but the output value can still be used for further operations.

To create a new virtual sensor, press the "+" button.





Sensor name

This name is displayed on the web interface. The length of the text field is limited to 20 characters.

Sensor description

Description is for information only.

- Type of virtual sensor You can choose from the categories: Display, Functions, Operations, Value determination, Extreme values and Energy. E.G: --System variables: Hour, minute, second. --Calculation: addition, subtraction, multiplication, division. --Logical operators: AND, OR, XOR.

- Measuring unit Text field in which the unit of the virtual sensor can be entered.

- Result is displayed in new virtual sensor Depending on the type of virtual sensor, you will be given further selection options. In the example, a subtraction is to be carried out with the two operands "Counter reading 1" and "Counter reading 2". The result is displayed in the new virtual sensor "Difference" on the main page.

! Delete this virtual sensor ! This button is available after saving for the first time.

Sensor description

Description is for information only.

- Type of virtual sensor You can choose from the categories: Display, Functions, Operations, Value determination, Extreme values and Energy. E.G: --System variables: Hour, minute, second. --Calculation: addition, subtraction, multiplication, division. --Logical operators: AND, OR, XOR.

- Measuring unit Text field in which the unit of the virtual sensor can be entered.

- Result is displayed in new virtual sensor Depending on the type of virtual sensor, you will be given further selection options. In the example, a subtraction is to be carried out with the two operands "Counter reading 1" and "Counter reading 2". The result is displayed in the new virtual sensor "Difference" on the main page.

! Delete this virtual sensor ! This button is available after saving for the first time.

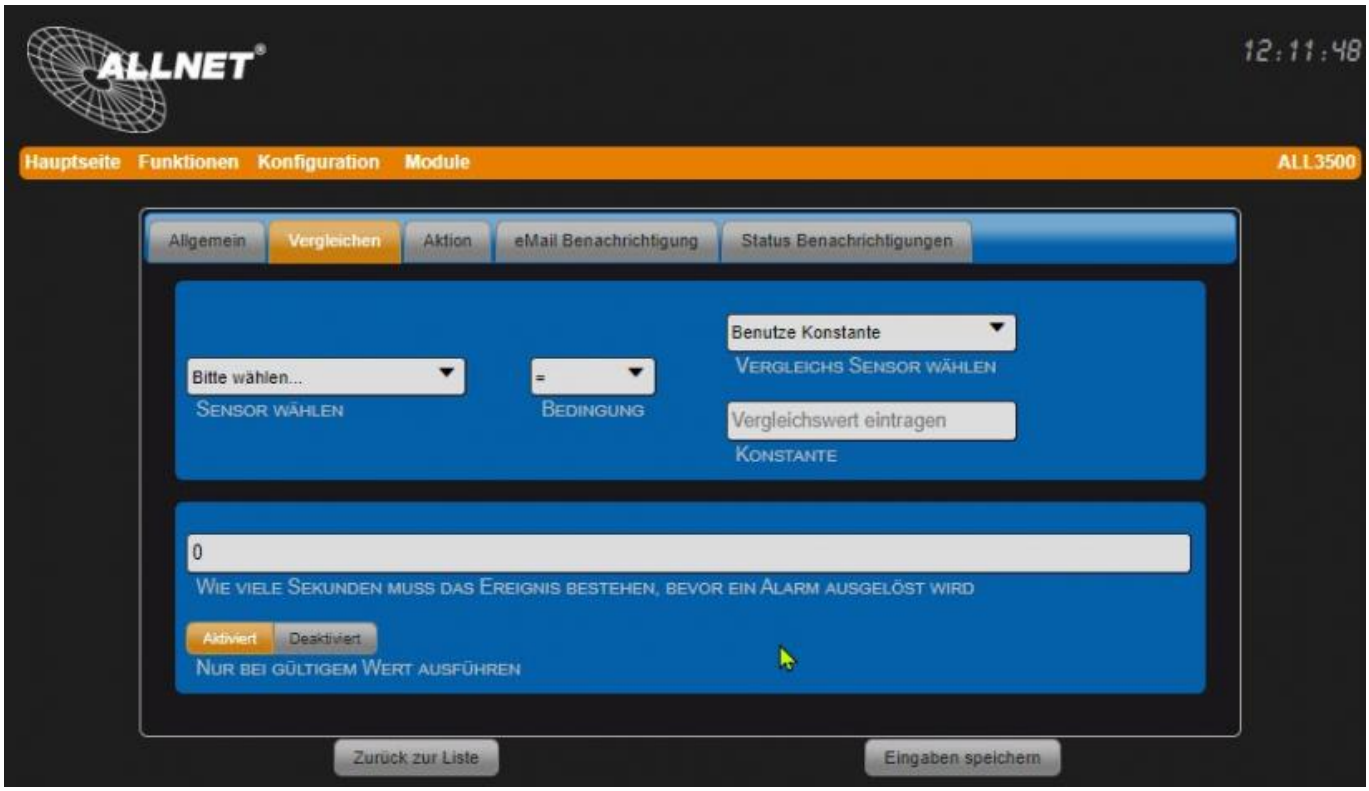
Actions

Actions

Setting options under "Functions" > "Actions". Actions" can be used to program the triggering of actions by comparing or evaluating sensor values. Actuators can be switched and/or e-mails can be sent. For example, the system status can be sent by e-mail after booting or daily at a specific time. A total of 32 actions can be defined.

"General" tab

- Action Activated / Deactivated: Created actions can be temporarily deactivated.
- Name: Maximum 20 characters. The name is displayed in the table of actions.
- Description: Provides a more detailed description.
- Delete action: This button appears after at least one action has been saved.



"Compare" tab

- Select sensor

All applied sensors can be selected as a reference.

- Condition

Operators: < <= = >= > <>

- Select comparison sensor

You can choose between sensor or constant.

- Constant

Values can be entered with or without a comma.

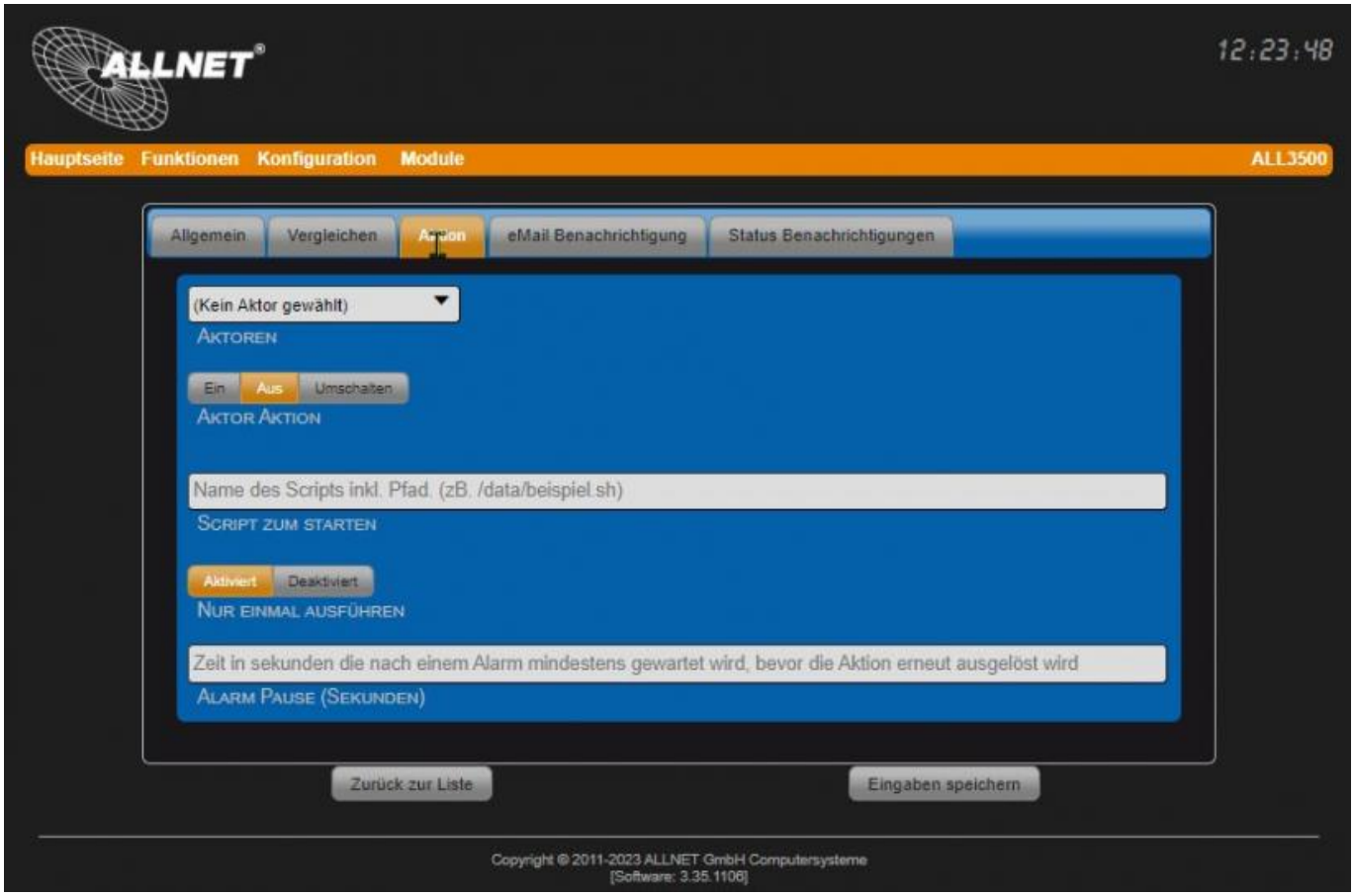
- How many seconds must the event last, ...

Time in seconds that the condition must be continuously fulfilled before the action is executed. Default: 0 seconds.

- Only execute if the value is valid

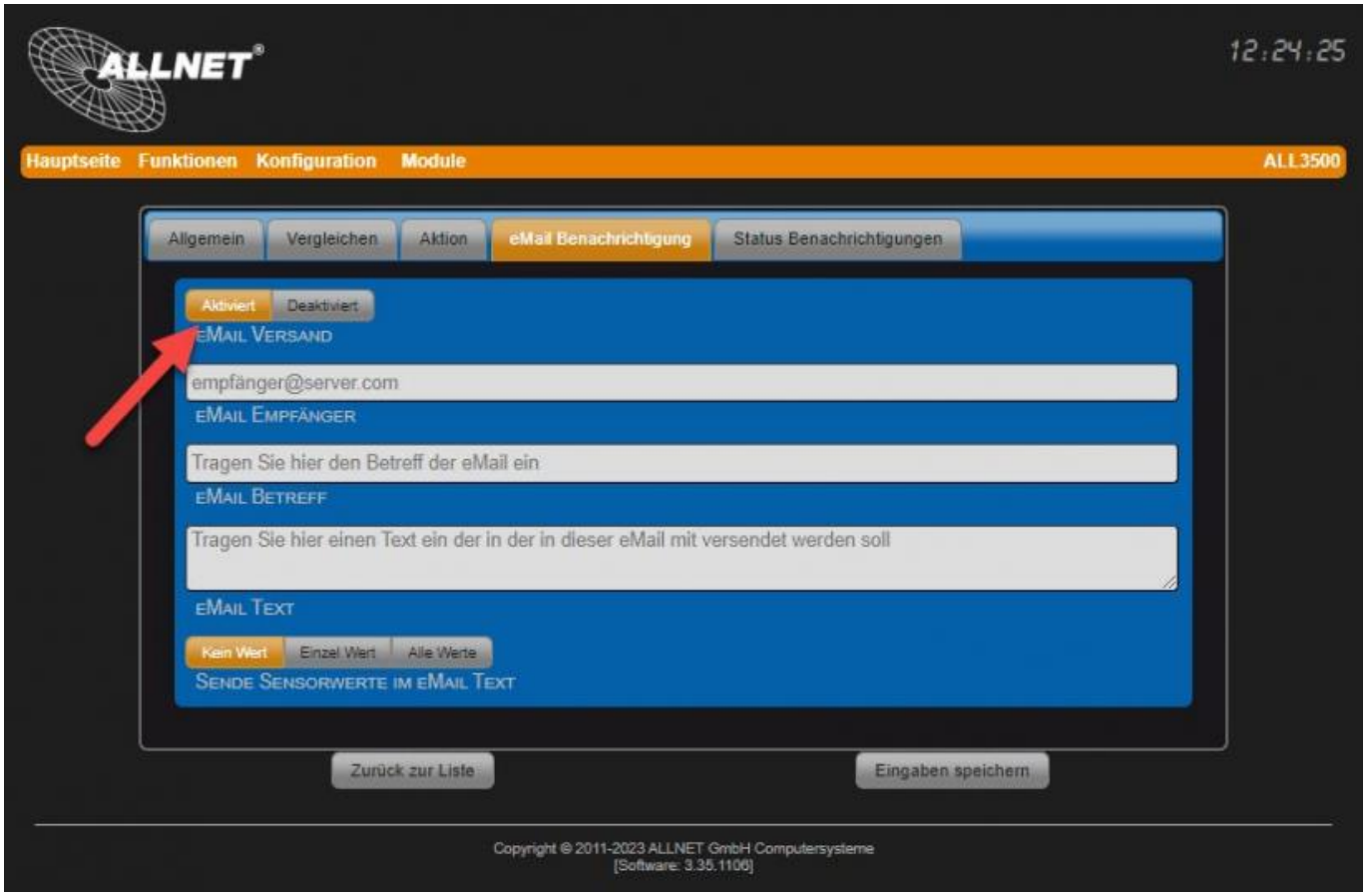
The action should only be executed if all operators involved in the comparison return a valid value.

Default: Activated. This is intended for the event that, for example, the cable connection to a temperature sensor is interrupted. The sensor provides a value that signals the minimum temperature. The condition for the "Heating" action is fulfilled but is not very useful as it would no longer be switched off.



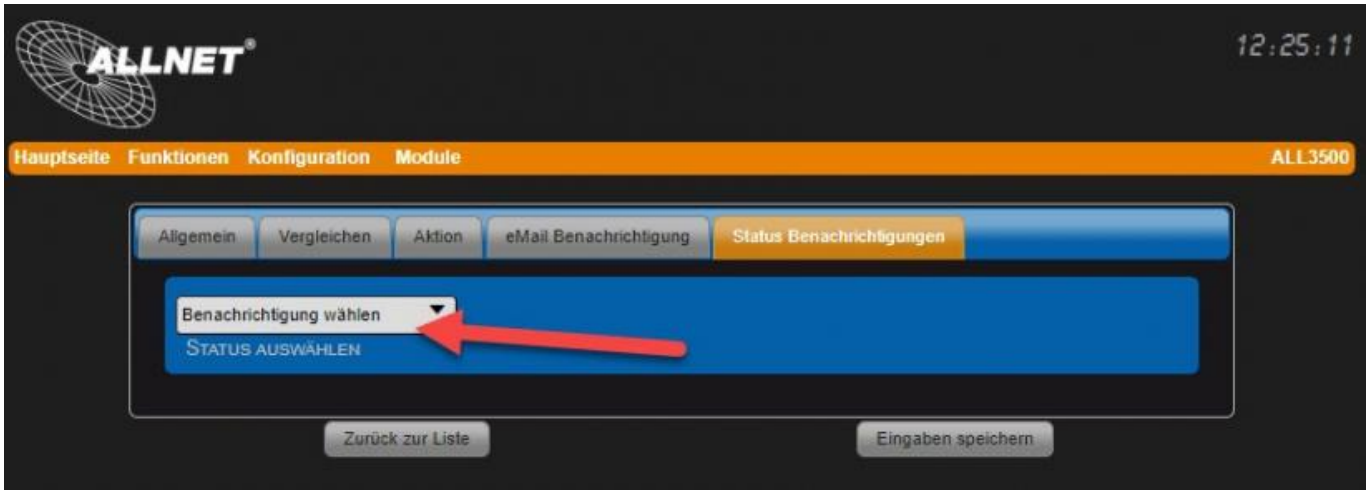
"Action" tab

- Actuators All actuators that have already been created can be selected.
- Actuator action Choose between: On / Off / Toggle.
- Script to start Optional, there must be a Linux shell script on the device that is started by this call. This function is only intended for experts.
- Execute only once If this function is activated, the action is executed exactly once when the threshold value is reached. If the switch is deactivated, the action is executed continuously (usually 10 times per second). If only one e-mail is to be sent, "Enabled" must be set.
- Action Pause (seconds) Default = 1 second. The switching rule is ignored for this time after triggering before it is reactivated. It is important to select a reasonable time here if you intend to send warning e-mails continuously.



"Email notification" tab

- Email dispatch: Function: Activated / Deactivated.
- Email recipient: E-mail address of the recipient.
- Email Subject: Subject line for the e-mail.
- Email Text: Enter the text for the e-mail here.
- Send sensor values in email text: Selection of the values to be sent in the e-mail text.
- Select sensor: Sensor whose value is to be transmitted in the e-mail text. Only displayed for single value.



"Status notification tab"

E-mail notifications can be sent about the current system status. Activating these notifications deactivates the execution of other settings for this action.

- Select status: An e-mail can be sent on booting or the system status can be sent daily.
- Shipping time: If System status is selected, a time can be set for daily dispatch.

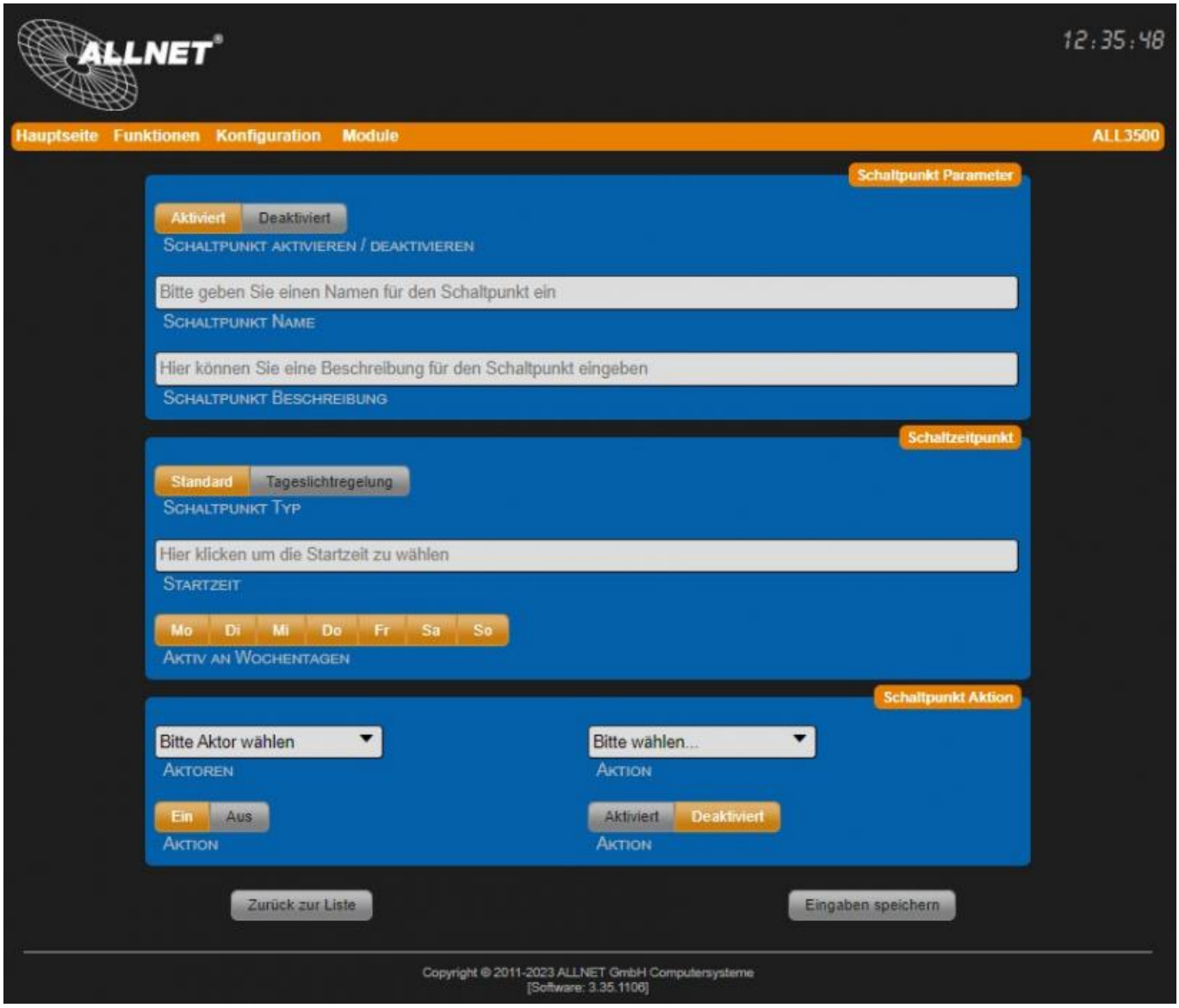
Time control

Time control

Content

Setting options under "Functions" > "Time control". Time-dependent switching points can be defined. The resolution is 1 second. A maximum of 128 switching points can be defined.

After clicking on the "+" button, the screen for setting up a new switching point opens automatically.



- Activate / Deactivate switching point Activate or deactivate the switching point.

- Switching point name Select a name for this switching point. This name is displayed on the overview page.

- Switching point description The description is for detailed information, but is not displayed on the overview page.

- Switching point type Choose between the explicit definition of a start time or define the switching time depending on the following settings, which are recalculated daily:

- Start time Use the three sliders to select the desired time.

- Active on weekdays Click to select.

- Actuators Select the desired actuator via the selection menu.

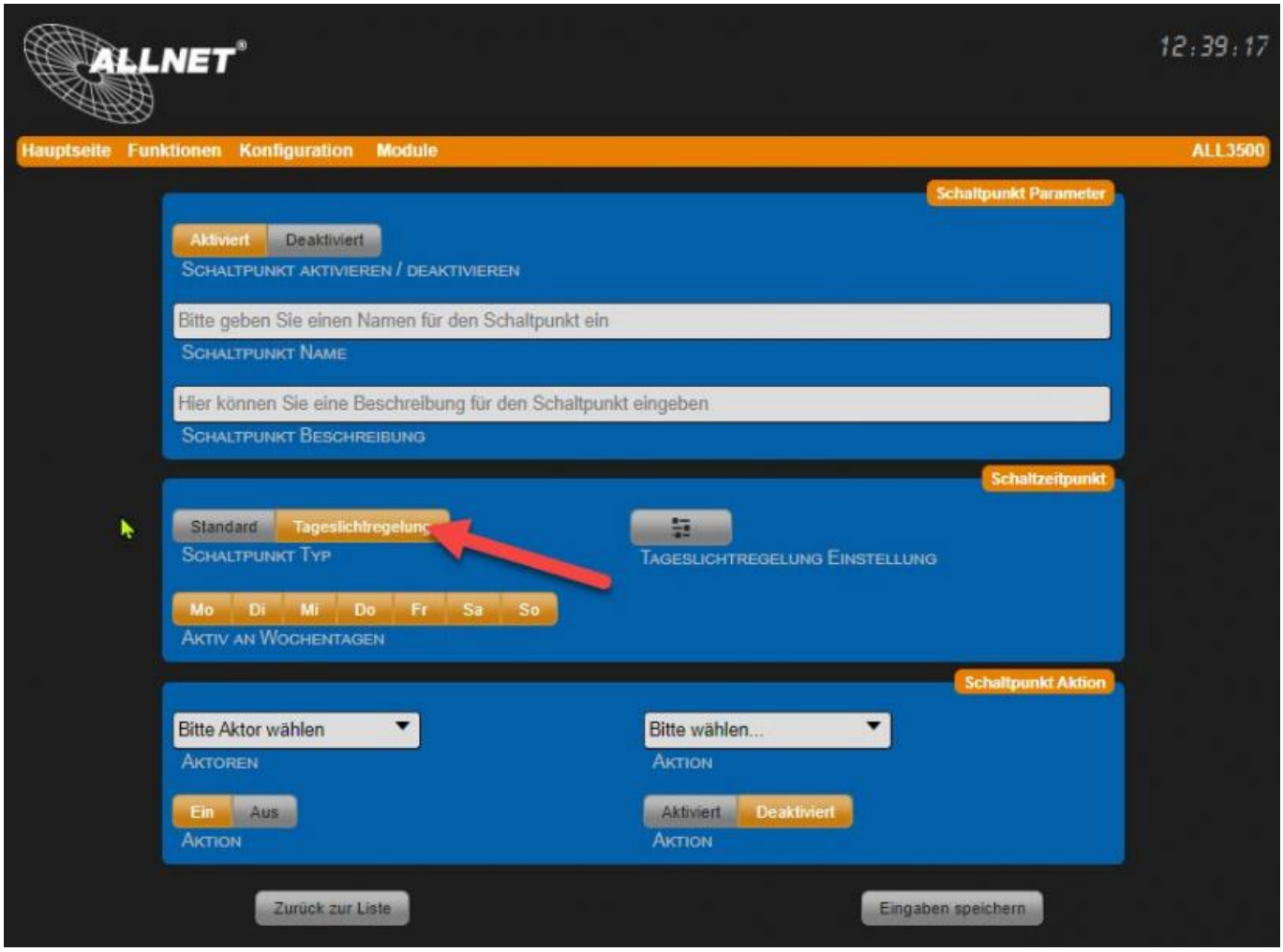
- Action (On / Off) If "On" is selected, the relay of the selected actuator is closed at this moment. For various tasks, it may be necessary for the relay to open at the starting point; "Off" can be selected for this.

- Action (selection menu) Select the desired action via the selection menu.

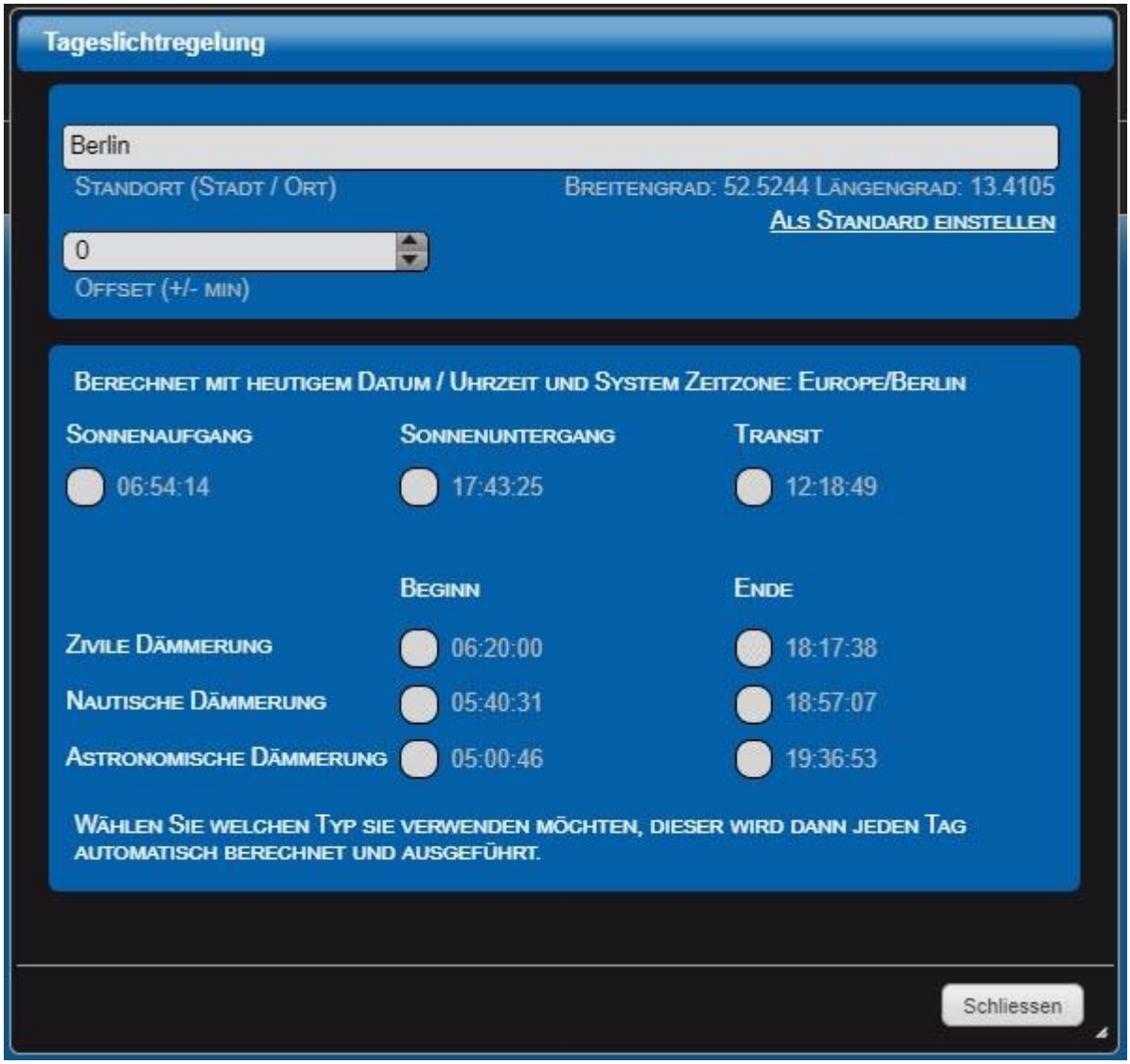
- Action (activated / deactivated) Activate or deactivate action.

Daylight control

The daylight control allows control by sunrise. E.g. light on/off or shutters up/down.



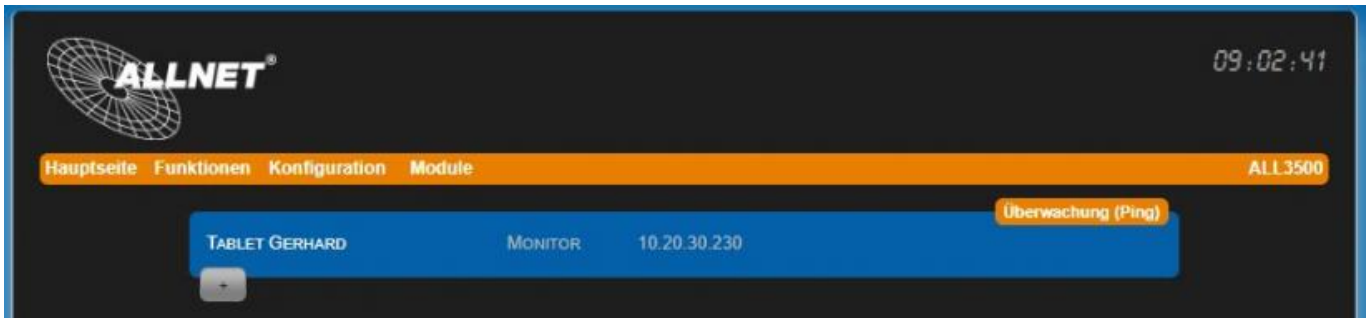
To do this, click on the slider. The time is calculated automatically based on the location.


Tageslichtregelung
Berlin
Standort (Stadt / Ort)
Breitengrad: 52.5244 Längengrad: 13.4105
Als Standard einstellen
0
Offset (+/- min)
Berechnet mit heutigem Datum / Uhrzeit und System Zeitzone: Europe/Berlin
Sonnenaufgang
Sonnenuntergang
Transit
06:54:14
17:43:25
12:18:49
Beginn
Ende
Zivile Dämmerung
06:20:00
18:17:38
Nautische Dämmerung
05:40:31
18:57:07
Astronomische Dämmerung
05:00:46
19:36:53
Wählen Sie welchen Typ sie verwenden möchten, dieser wird dann jeden Tag automatisch berechnet und ausgeführt.
Schliessen

Monitoring

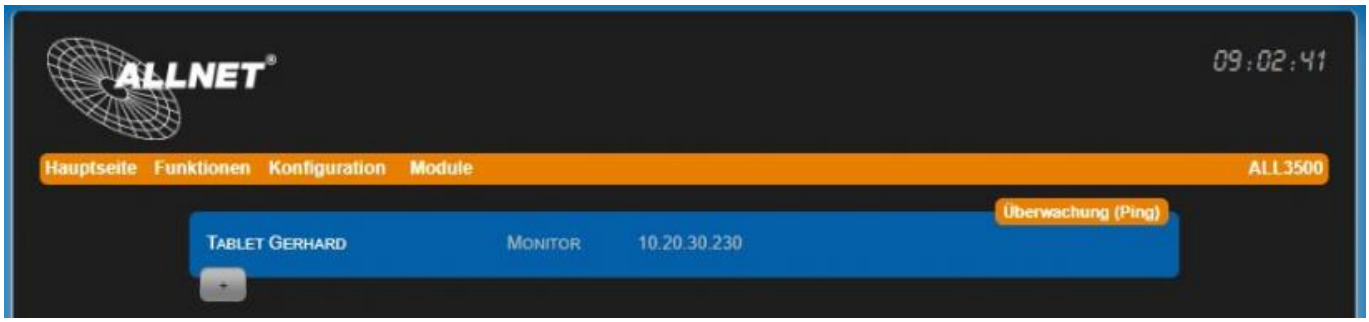
Monitoring

Content



Setting options under "Functions" > "Monitoring".

Similar to a watchdog, you can use this function to monitor remote IP devices such as routers or servers. By regularly sending a ping command, you can evaluate whether the device is still responding and restart it if necessary.



Press the "+" button to create a new monitoring action.

- Monitoring Activate or deactivate Activate or deactivate monitoring.

- Monitoring name Select a name for this monitoring. This name is displayed on the web interface.

- Description Descriptive text, is not displayed on the web interface.

- IP or URLURLURL address IP address or URL of the device to be monitored.

- Number of seconds until the monitored device ... Default = 5 seconds. The actuator is then activated.

- Reset duration in seconds Default = 5 seconds. Actuator is activated for this time.

- Boot duration of the monitored device Default = 15 seconds. The system waits until the connection is tested again.

- Actuators Selection of the desired actuator (switching output), which is to switch the monitored device on/off, for example.

- Actuator action Default: "Off". Here you can specify whether the actuator should switch "On" (e.g. close relay) or "Off" (e.g. open relay) in the event of an error and vice versa.

Recording

Recording

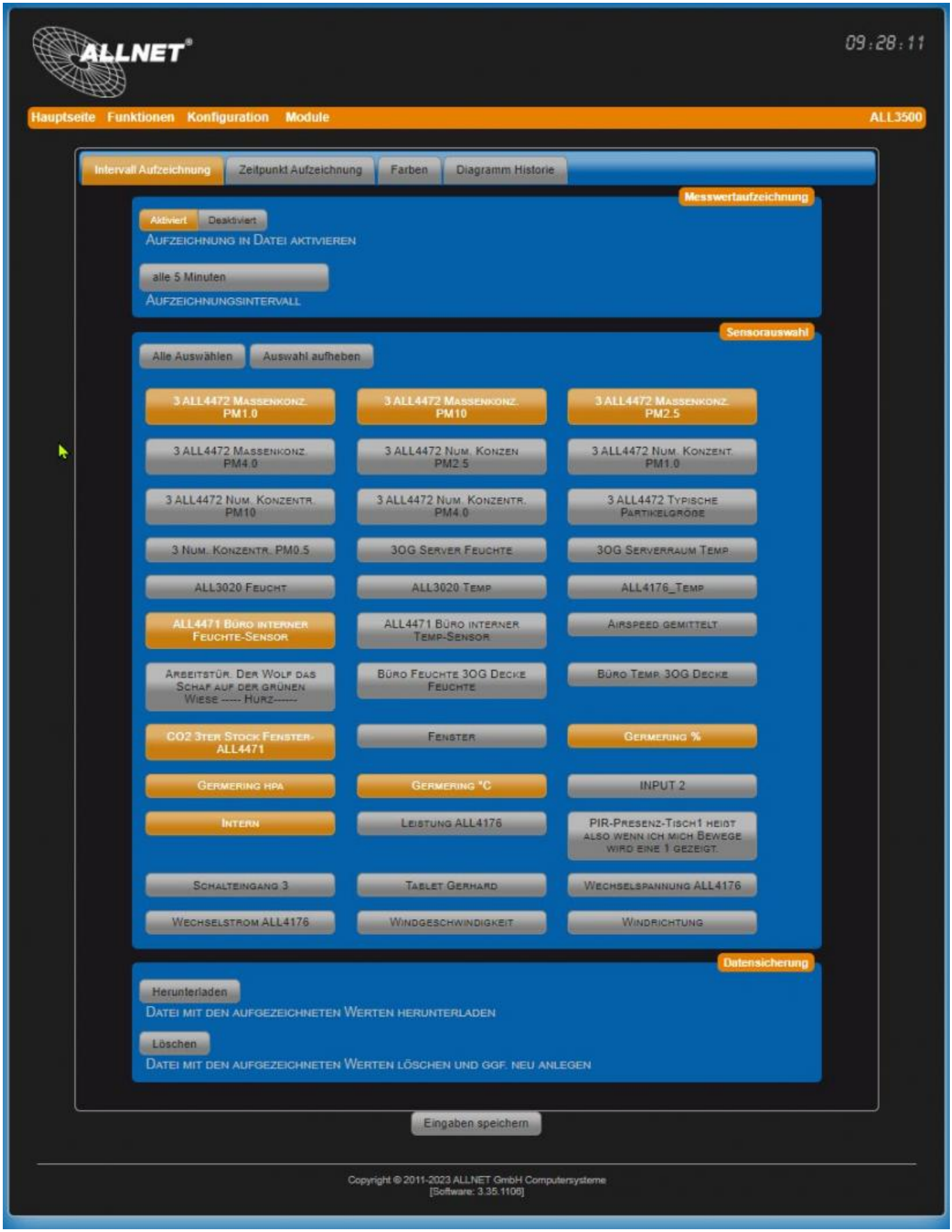
Setting options under "Functions" > "Recording".

The values of sensors and actuators can be recorded long-term in a file in the device. This recording serves as the basis for the evaluation on this device (see section "7.7 Evaluation" on page 60). The file can also be downloaded as a CSV file and processed further on the PC using various programs. The device has approx. 4 GB of flash memory available for the data. A new file with a new name is created automatically every month (Year_Month.csv). Existing files are not deleted automatically.

Please note the following difference: - "Interval recording": The value averaged over the set period (interval) is recorded.

- "Time recording": The instantaneous value is recorded at the set time interval.

"Interval recording" tab



- Activate recording in file Default = Deactivated. Activate for recording.

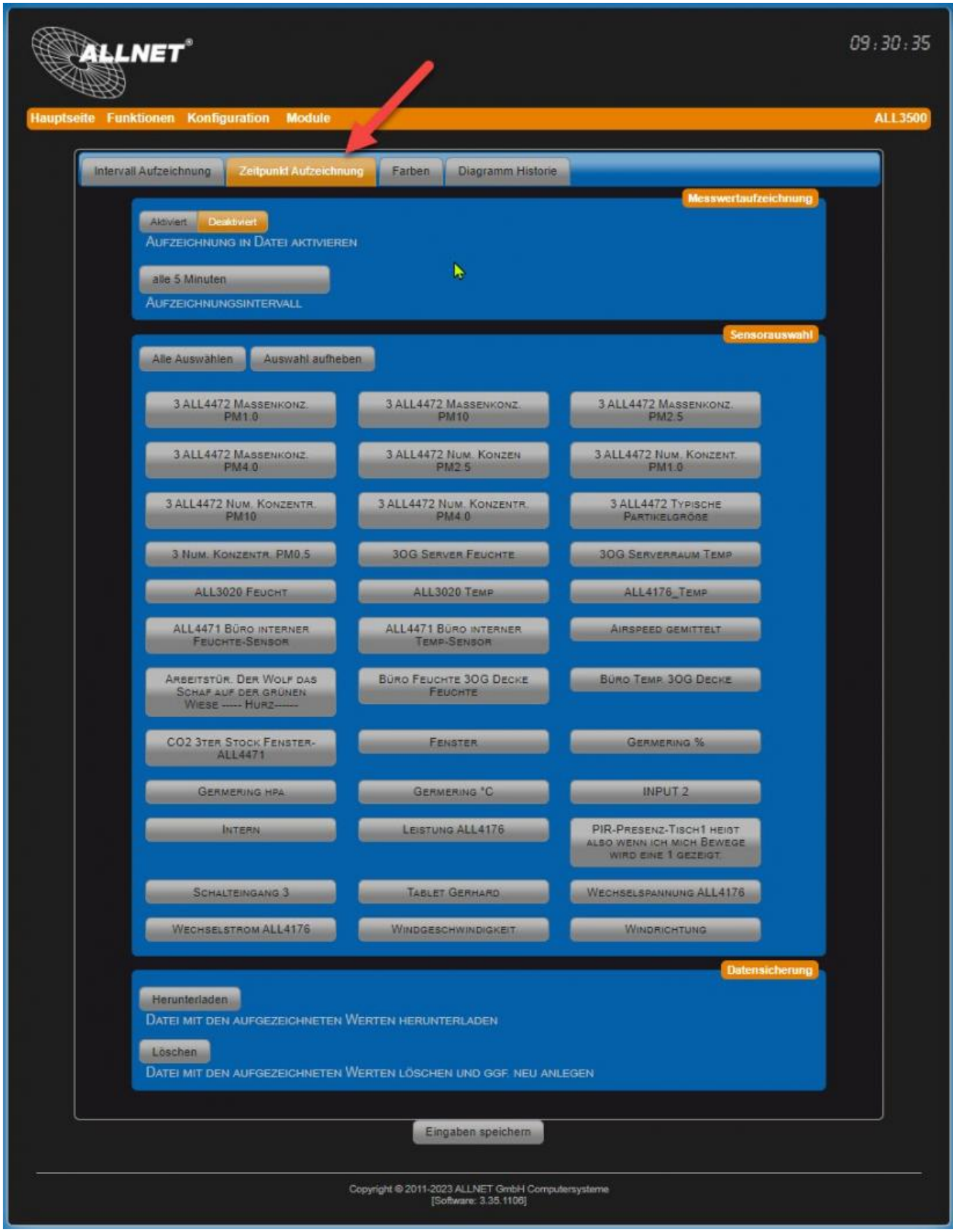
- Recording interval Default = 5 minutes. The value is averaged over the set time interval and saved (see 7.6.2).

- Sensor selection Select the sensors whose data is to be saved in the file. All sensors are selected with the "Select all" button and deselected with "Deselect".

- Download Download the file with the displayed values. Enter the URL in the form: http://ipadresse/data/

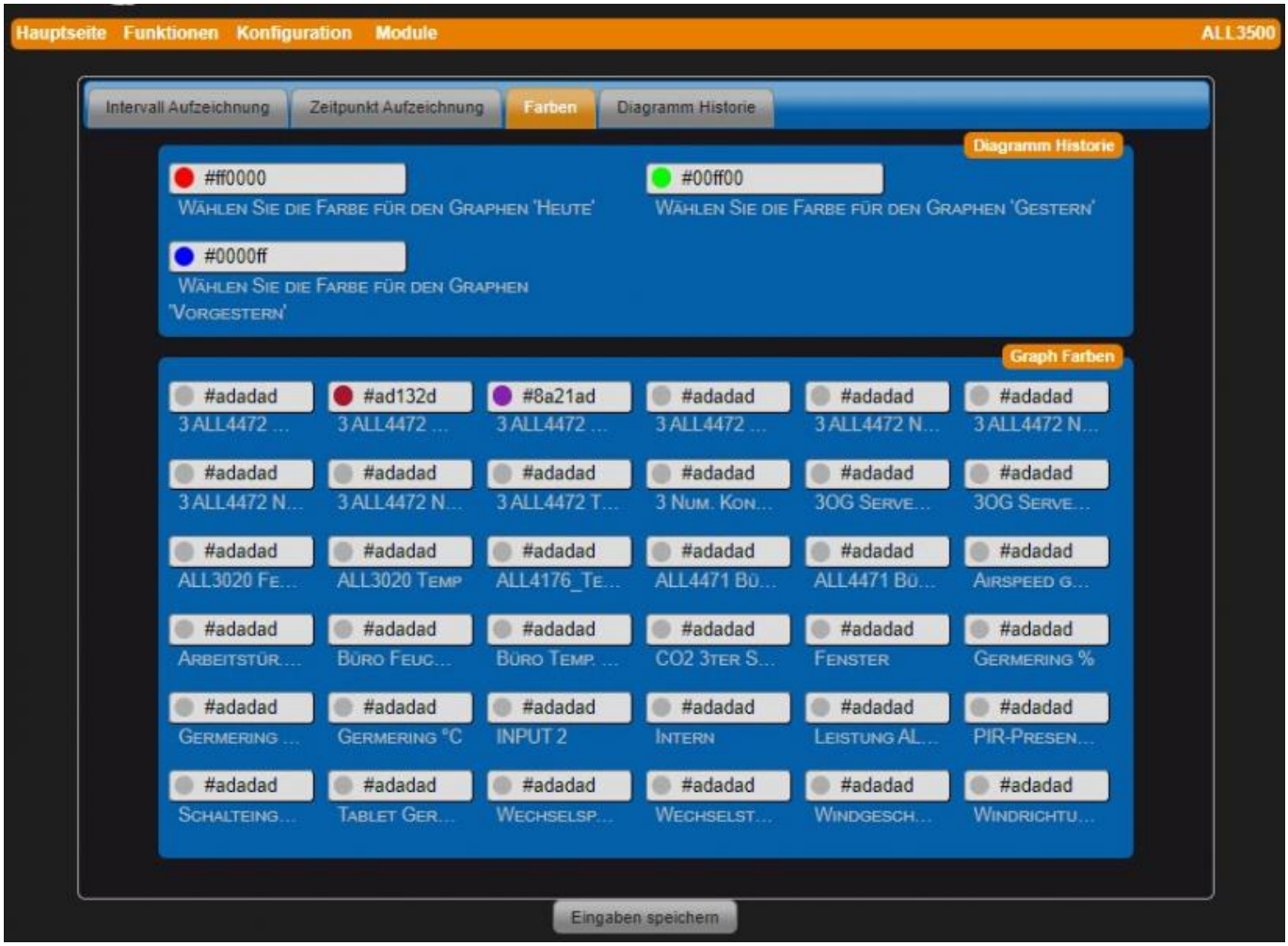
- Delete Delete existing files. Please note that only all files can be deleted together!

"Time recording" tab



- Activate recording in file

Default = Deactivated. Activate for recording.



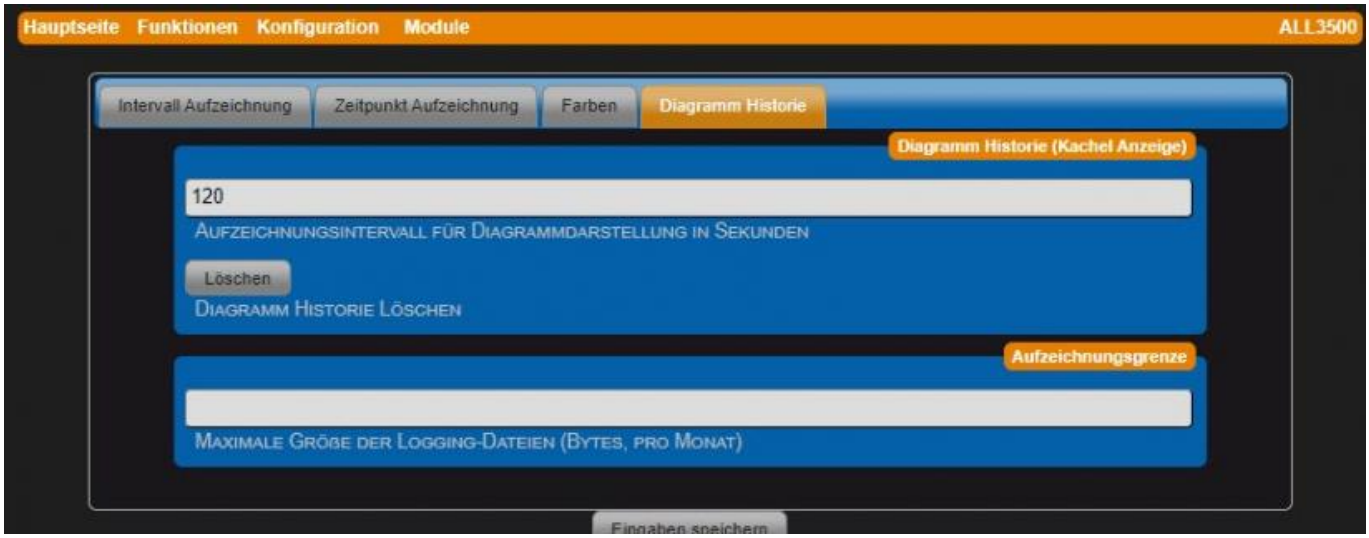
- Select the color for the 'Today' graph Color for the curve of the current day. Default: #ff0000 (red).

- Select the color for the graph 'Yesterday' Color for yesterday's curve. Default: #00ff00 (green).

- Select the color for the graph 'The day before yesterday' Color for the curve from the day before yesterday. Default: #0000ff (blue).

- **Graph colors** A color can be defined for each sensor value. Default for all sensors: #adadad (gray).

Default = 5 minutes. The value is averaged over the set time interval and saved



- Recording interval for diagram display... Recording interval for diagram display in seconds. Default: 240 seconds.

- Delete

Delete diagram history.

- Maximum size of logging files (bytes, per month)

Maximum size per log file in bytes. Debug outputs of the device daemons are saved monthly in a file (e.g. 201701.log, 201702.log,...). Default: 150,000 bytes.

- Delete

Delete existing files. Please note that only all files can be deleted together!

"Colors" tab

- Select the color for the 'Today' graph Color for the curve of the current day. Default: #ff0000 (red).
- Select the color for the 'Yesterday' graph Color for yesterday's curve. Default: #00ff00 (green).
- Select the color for the graphphen 'day before yesterday' Color for the curve from the day before yesterday. Default: #0000ff (blue).

"Diagram history" tab

- Recording interval for diagram display... Recording interval for diagram display in seconds. Default: 240 seconds.

- Delete

Delete diagram history.

- Maximum size of logging files (bytes, per month) Maximum size per log file in bytes. Debug outputs of the device daemons are saved monthly in a file (e.g. 201701.log, 201702.log,...). Default: 150,000 bytes.

"Access protection" tab

Restrict access to files in the /data directory.

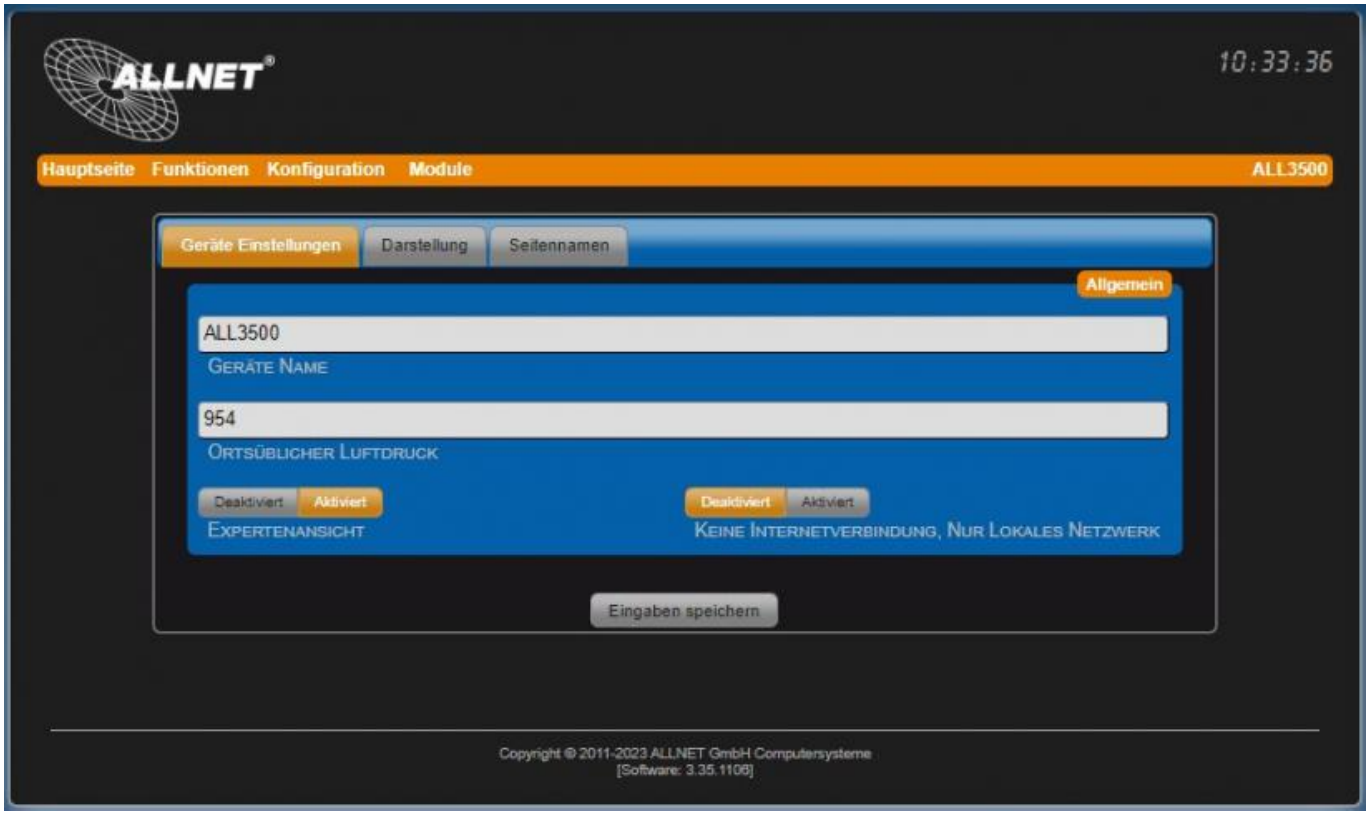
Configuration

[TOC]

Device settings

Device settings

Under Configuration you will find the item Device settings. General settings can be adjusted here and the expert view can be activated.



- Device name This name is shown at the top right of all web pages and in the OLED display next to the IP address.

- Local air pressure The local air pressure must be specified in order to correct the display values of the pressure sensors. The sensors measure the air pressure in absolute terms, but the display is usually in relative values. The local air pressure is influenced by the current altitude above sea level and local differences. You can find out the local air pressure from your local weather office. Further information on this topic: http://de.wikipedia.org/wiki/Luftdruck.

- Expert view Activating the expert view reveals additional settings that are not relevant for most users.

- No Internet connection, local network only Activate this setting if it is not possible for the ALL34119/3500/3697/3692 etc. to access the Internet when starting up for security reasons. The settings for the NTP server must then refer to a local NTP server (see Date and time). The automatic update service is switched off.

"Display" tab

Setting options under "Configuration" > "Device settings". All settings relating to the display and behavior of the device can be adjusted.

Note! All settings in the "Display" tab affect all sensors and actuators in this device. As soon as you click on the "Apply" button, the respective setting is applied to all sensors and actuators. This overwrites the setting that can normally be made individually for each sensor/actuator!


Hauptseite Funktionen Konfiguration Module ALL3500
Geräte Einstellungen
Darstellung
Seitennamen
Darstellung
1 2 3 4 5 6 7 8 9 10
Anzahl der Seiten für die Darstellung der Kacheln
1 2 3 4 5
Standard Tab beim laden
1 2 3 4 5 6 7 8 9 10
Anzahl der Spalten für die Darstellung der Kacheln
1
Interval für Sensor-Updates (Sekunden)
Wetter Widget
Deaktiviert Aktiviert
Wetter-Widget anzeigen
Schaltfläche konfigurieren [Aktoren]
#404040
Farbe für Zustand 'Aus'
#009900
Farbe für Zustand 'Ein'
Anwenden
Auf alle Anwenden
Standardwerte Aktoren
Ein Aus Letzter Zustand
Zustand des Ausgangs nach Neustart
Anwenden
Auf alle Anwenden
Wert setzen Aus Letzter Zustand
Zustand des Analogen Ausgangs nach Neustart
Wert setzen
Anwenden
Auf alle Anwenden
[Digital Aktoren/Sensoren]
Deaktiviert Aktiviert
Kachel Farbwechsel bei Ein/Aus
Anwenden
Auf alle Anwenden
#1e7eac
Kachelfarbe Zustand 'Aus'
#990000
Kachelfarbe Zustand 'Ein'
Anwenden
Auf alle Anwenden
[Analog Sensoren]
Deaktiviert Aktiviert
Bei über- / unterschreitung Farbe wechseln
Anwenden
Auf alle Anwenden
#1e7eac
Kachelfarbe Zustand 'Normal'
#990000
Kachelfarbe Zustand 'Min'
#990000
Kachelfarbe Zustand 'Max'
Anwenden
Auf alle Anwenden
Wert zu Text [Digital Sensoren]
Text für Zustand 0
Text für Zustand 1
Anwenden
Auf alle Anwenden
Deaktiviert Aktiviert
Zustand 0/1 einen Text zuweisen
Anwenden
Auf alle Anwenden
Text Kachel Schriftgröße [Sensoren]
55
Schriftgröße für Doppelte Breite
Anwenden
Auf alle Anwenden
33
Schriftgröße für Einfache Breite
Anwenden
Auf alle Anwenden
Eingaben speichern

- Number of pages for displaying the tiles The display of the sensors/actuators can be split over several pages. An additional "Page names" tab is displayed when multiple pages are set.

- Number of columns for displaying the tiles The display of the sensors/actuators is divided into the specified number of adjacent tiles.

- Standard tab when loading This setting defines which page should be displayed when the website is loaded.

- Show weather widget Show weather widget.

- Color for "OFF" status Setting the background color of the icons for switches when switched off.

- Color for "ON" status Setting the background color of the icons for switches when switched on.

- Status of the output after restart Setting for the default state of digital actuators/outputs. You can choose between "On", "Off" and "Last status". The setting applies to all digital actuators/outputs.

- State of the analog output after restart Setting for the default value of analog actuators/outputs. You can choose between "Set value" (enter value in the "Set value" field), "Off" and "Last status". The setting applies to all analog outputs.

- Tile color change on on/off Activate this option if you want the tile color of all digital actuators and sensors to change depending on their status.

- Tile color state 'Off' Set the desired color with the color selector.

- Tile color state 'On' Set the desired color with the color selector.

- Change color if above/below limit Activate this option if you want the tile color of all analog sensors to change depending on defined threshold values. The threshold value is defined for the respective sensors.

- Tile color condition 'Normal' Set the desired color with the color selector.

- Tile color condition 'Min' Set the desired color with the color selector.

- Tile color condition 'Max' Set the desired color with the color selector.

- Text for state 0 Text to be displayed for digital sensors (inputs) in state 0.

- Text for condition 1 Text to be displayed for digital sensors (inputs) in state 1.

- Assign a text to state 0/1 Activate this option if you want the text for all digital sensors (inputs) to change depending on the status.

- crotch size for double width Global setting for font size to be used for sensors (inputs) with double tile width. Default value: 55.

- Step size for single width Global setting for font size to be used for sensors (inputs) with double tile width. Default value: 33.

- Set default start page Here you can specify which of the sensor/actuator display pages should be shown when the device is first called up in the browser.

**Note: Changes to settings must always be confirmed with the "Apply" button.

"Page names" tab

Setting options under "Configuration" > "Device settings".

Here you can enter the page names for display on the overview page.

- Designation for page 1 Page name for page 1, max. 20 characters possible.

- Designation for page 2 Page name for page 2, max. 20 characters possible.

- Designation for page 3 Page name for page 3, max. 20 characters possible.

- Designation for page 4 Page name for page 4, max. 20 characters possible.

Note: The number of fields for the page names depends on the setting in the "Display" tab under "Number of pages for displaying tiles". If only one page is selected there, the "Page names" tab is not displayed. Display of page names on the overview page.

Sensor-actuator search

Sensor-actuator search

Setting options under "Configuration" > "Sensor Actuator Search". I2C ports are available for the MSR appliances. You can use all sensors and actuators from the ALLNET range that work exclusively with a supply voltage of 3.3 V. The connection is made either directly or via a so-called multiplex hub (also only via I2C and only one per port).

Add sensor/actuator

Proceed as follows (illustrations show ALL3500):

1. select all ports: Click on the "Select all" button to include all I2C ports in the search.

2. select individual connection: If your device only has one I2C port or you know exactly which I2C port your sensor/actuator is connected to, select the connection with a mouse click.

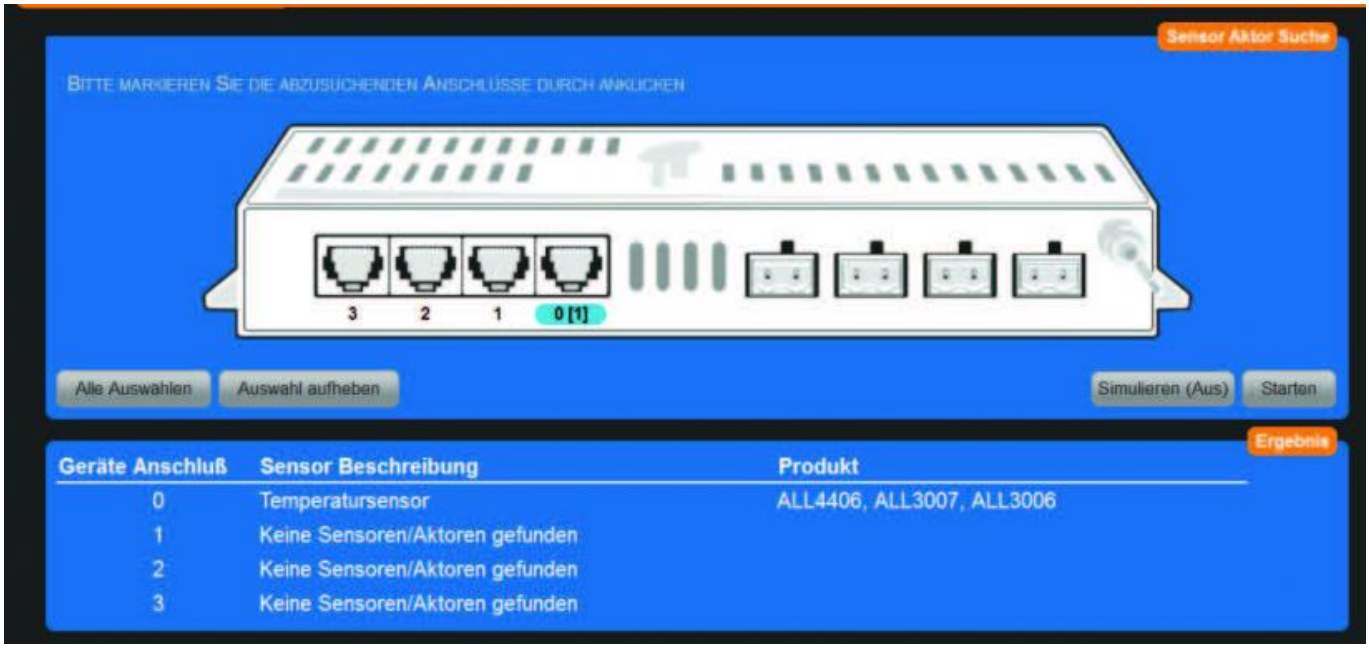
3. all selected connections must now be highlighted in green.

4. simulate (on/off): Click the "Simulate..." button (On: button is highlighted in orange) to run the sensor/actuator search in debug mode. The entire search for connected sensors/actuators is carried out. However, the sensors/actuators found are not added to the main page.

In our case, we leave the Simulate function switched off (default).

5. start search: Now click on "Start". The search is displayed animated.

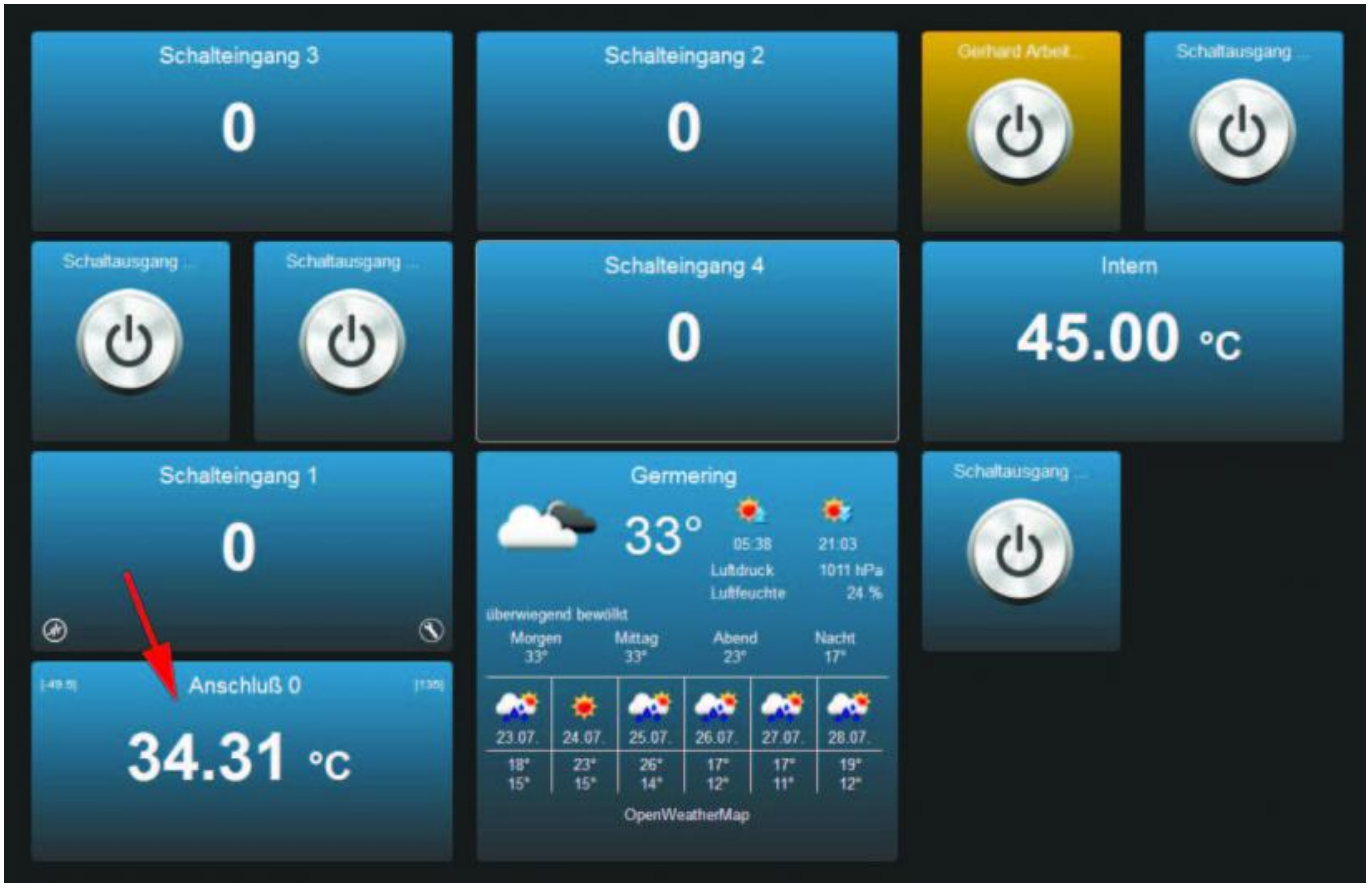
6. search completed: Once the search is complete, all sensors/actuators found are listed under "Result" with a brief description. The number of sensors/actuators connected to this port is shown in square brackets.



Note: Sensors that have already been added to the main page are no longer listed in a new search. The message "No new sensors/actuators found" is displayed.

7. sensor/actuator on the main page: In our example, the temperature sensor is now displayed on

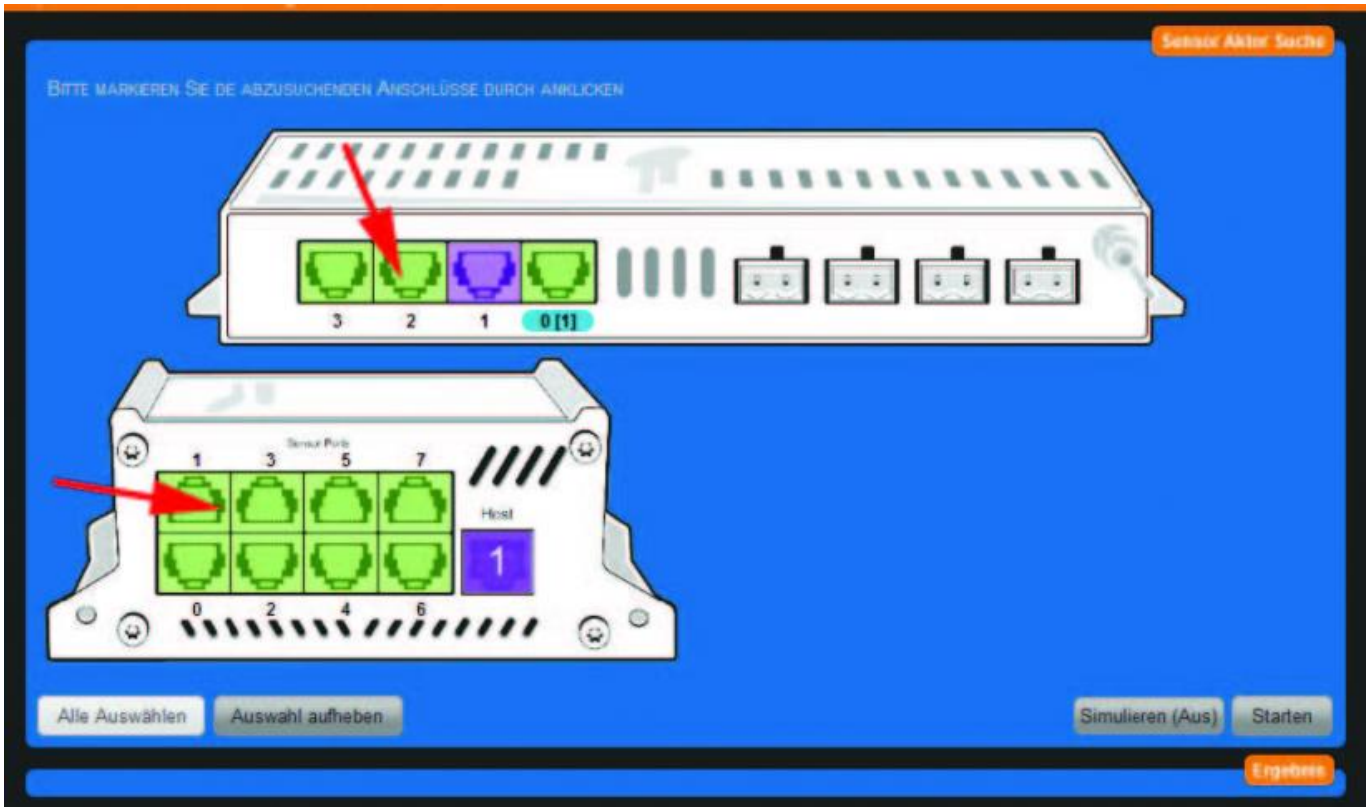
the web interface (menu "Main page" > "Overview") and can be configured further.



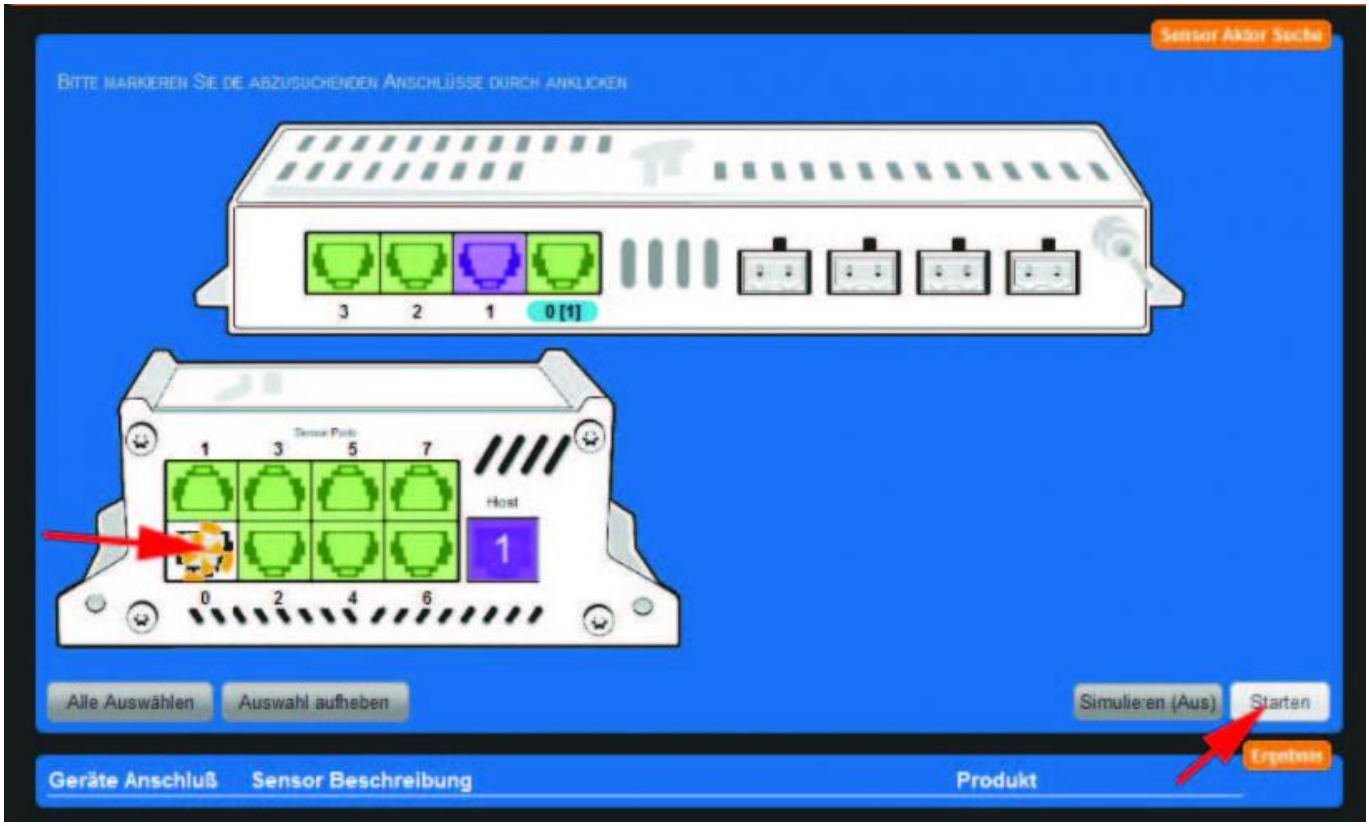
Add sensor/actuator via multiplex hub

If you want to add a sensor/actuator via an I2C multiplex hub, such as ALL4404 or ALL4504, the procedure is basically the same as described in chapter 8.2.1 on page 68. In the following example, the ALL4504 multiplex hub with 8 I2C sensor/actuator ports is used. The connection to the host is made here via the I2C port "1" (marked purple) of the ALL3500.

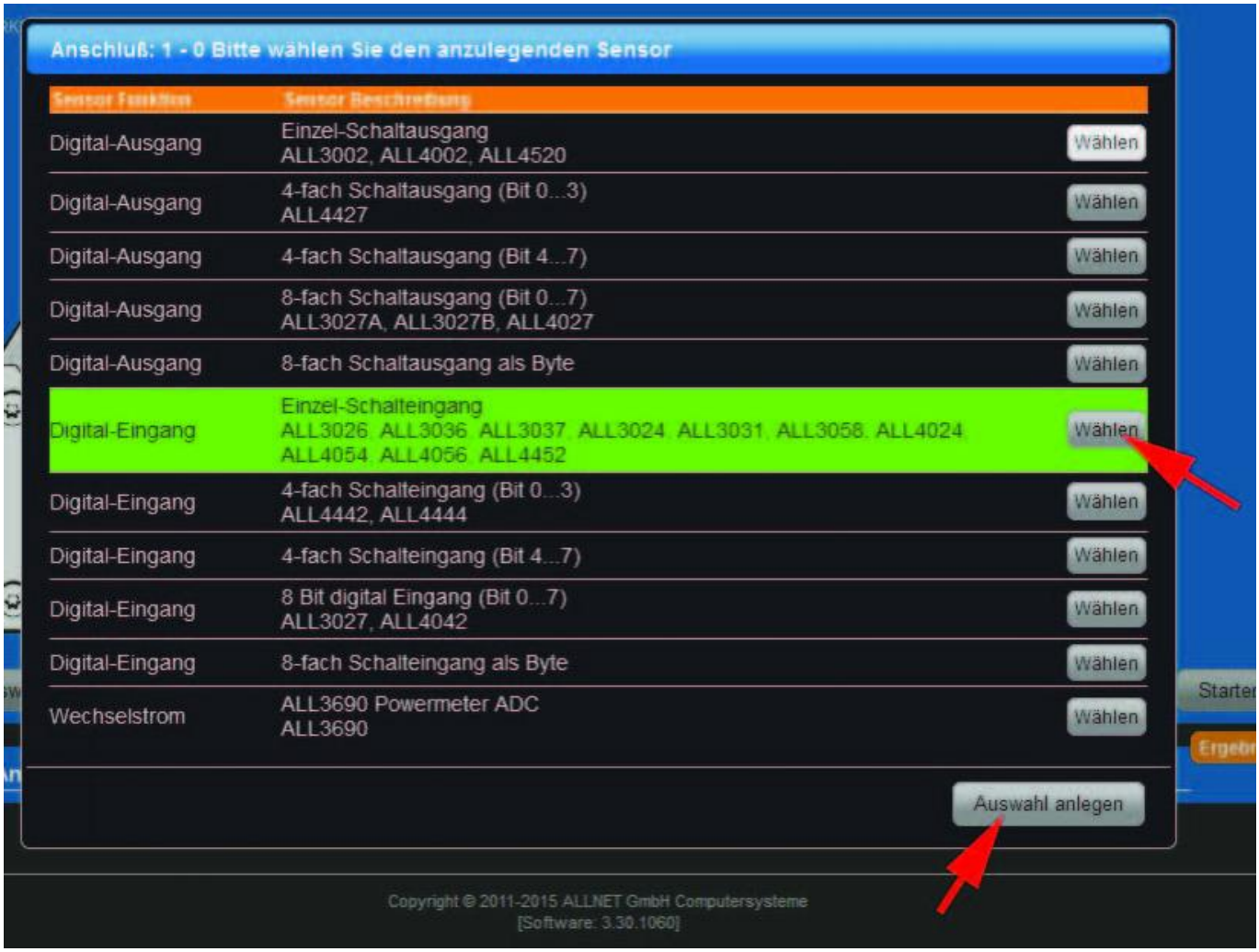
1. click on "Select all" to select all I2C ports.



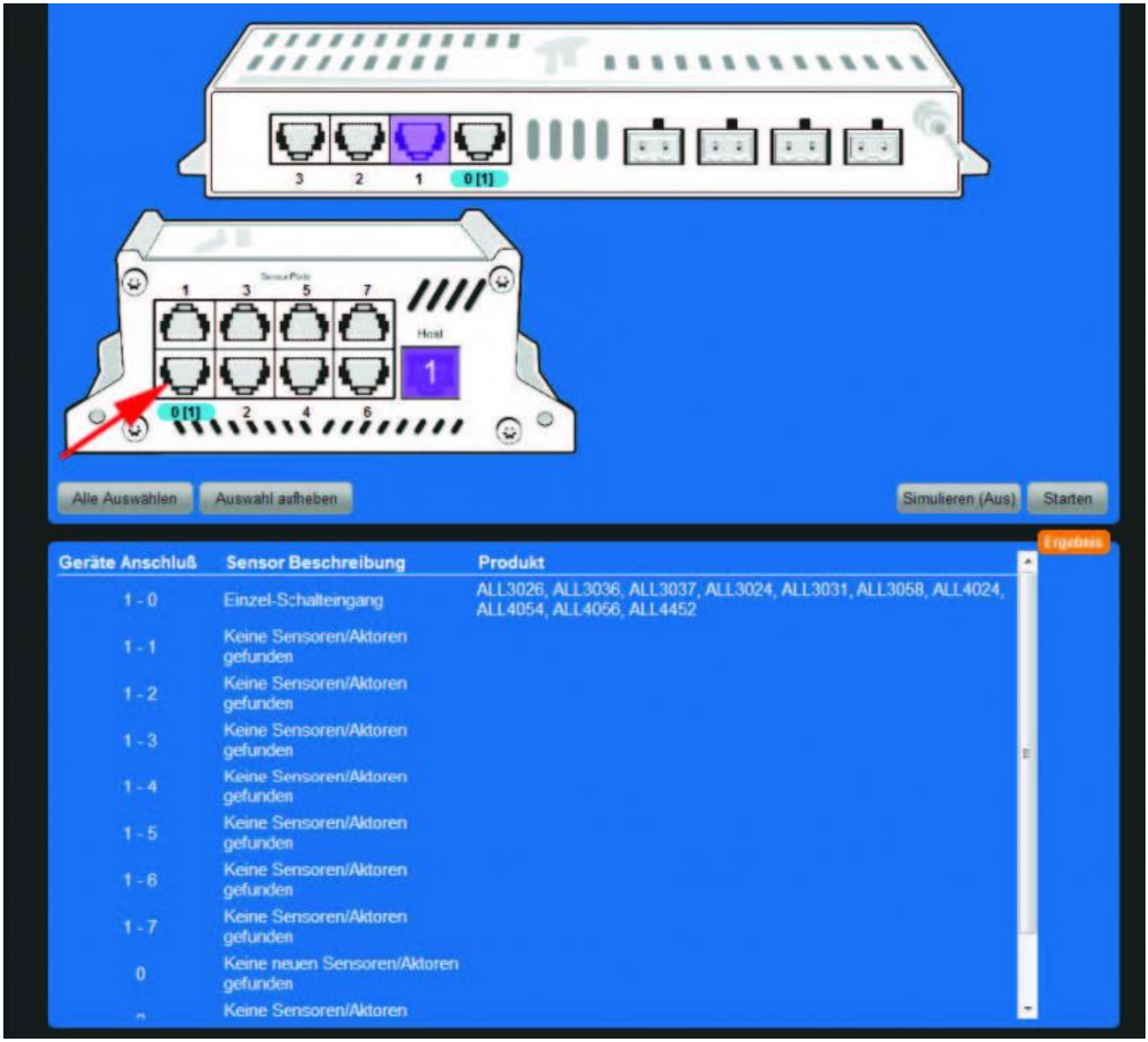
2. click "Start" to scan all ports marked in green.



3. in our case, an ALL4452 motion detector is connected to the Multiplex hub. This is of the "Single switching input" type. Click on "Select". The sensor field is marked "green". Then confirm with "Create selection".



4. the search is now complete and the sensors/actuators on the multiplex hub are first in the list. In the Connection column, the first digit is the port number on the host (highlighted in yellow) and the second digit is the port number on the hub (highlighted in orange). The number of sensors/actuators connected to this port is shown in square brackets.



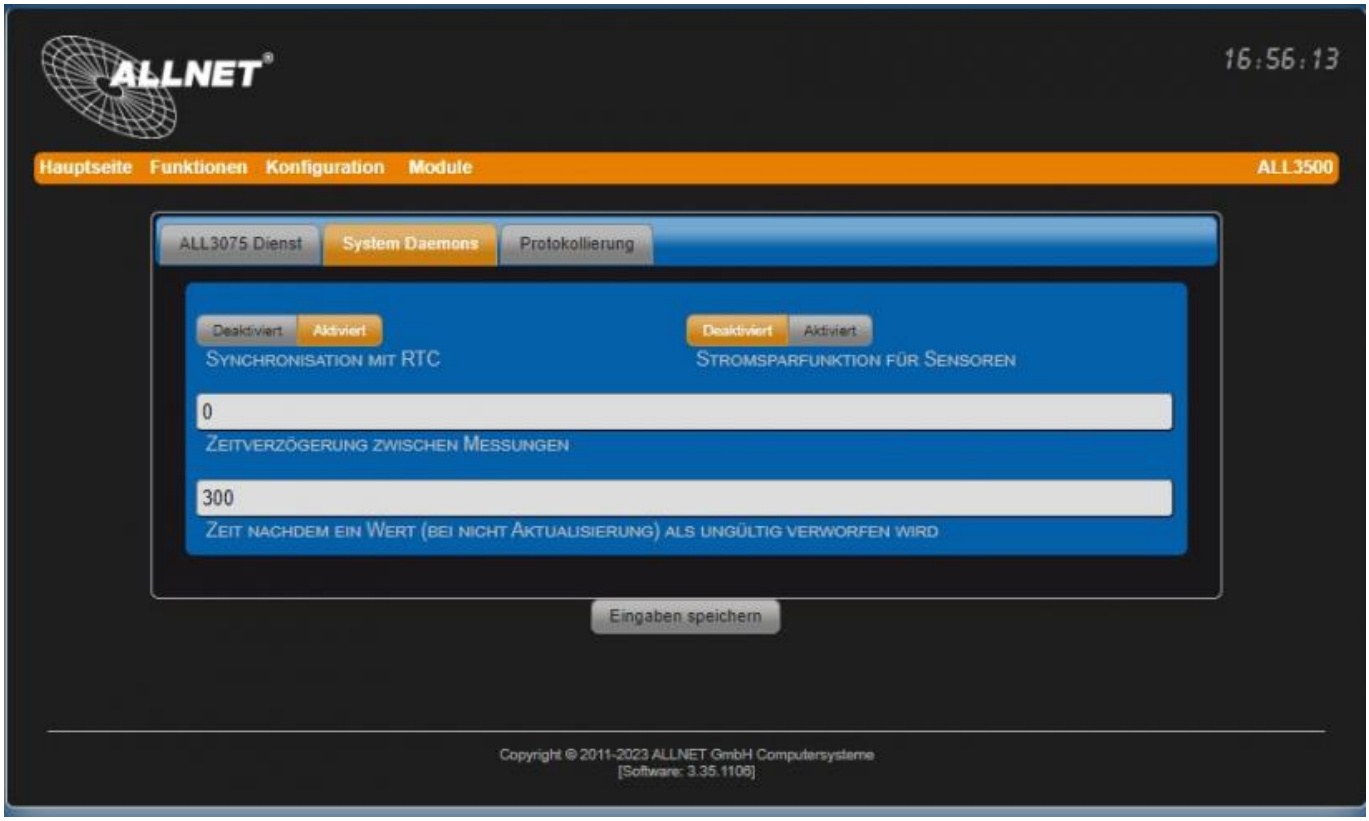
5. under the "Main page" > "Overview" menu, you will now see the new applied sensor. In the case of our motion sensor, the Display "0" no movement. A "1" means that the sensor has recognized a movement. You could now define an action to switch an actuator.

Services Settings

Services Settings

Setting options under "Configuration" > "Services settings". On this page, system services also called "System Daemons" and the logging of system events can be activated and configured.

System Daemons



- Synchronization with RTC Synchronization with real-time clock (Real Time Clock). The sensors are queried every full second. Deactivated: The sensors are queried continuously (not recommended due to higher system load and self-heating, e.g. of temperature sensors). Default = Activated.

- Time delay between measurements Default = 0 seconds. Time delay between two consecutive measurements.

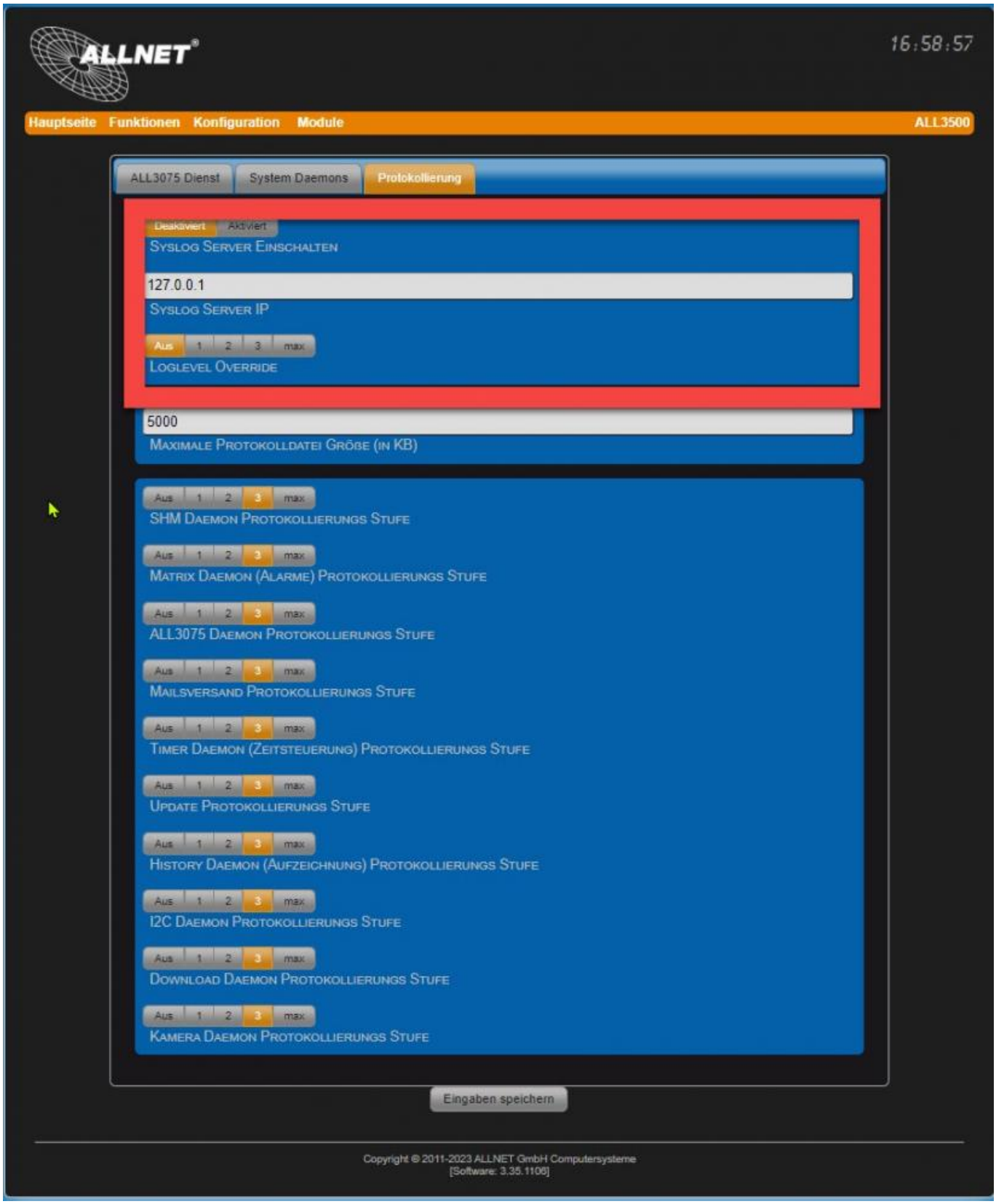
- Time after a value (...) is discarded as invalid Default = 300 seconds. Time after a value is discarded as invalid (in the event of non-actualization). Example: if values are imported from an external device, this device may no longer be accessible. To prevent its measured values from continuing to be displayed and suggesting a false sense of security, they can be set to "Invalid" after a time that can be defined with this parameter. This can be evaluated and displayed in the web interface, e.g. by changing the color of the sensor tile.

- Power saving function for sensors Default = Deactivated. If the device is used in conjunction with a battery, the power consumption can be reduced by activating this function.

- Idle time (only with activated power saving function)Default = 60 seconds. In battery operation, the sensors are only supplied with power for a short time every 60 seconds for the duration of the measurement in this setting. This value should be significantly lower than the value for discarding non-updated values (see parameter "Time after a value (...) is discarded as invalid").

- Wake-up time (only with activated power saving function)Default = 3 seconds. Depending on the type of sensors, it may be necessary to set this time longer.

Logging



These settings are only visible when the expert view is activated. Log messages can be sent to an external syslog server. Output from the activated daemons is sent to this server.

If the syslog server is deactivated, the log output of the individual daemons takes place internally on the device in the /tmp/wwwreports/ directory. Access to the system console can be established either via the COM1 interface or via the network using a Telnet program. The files can also be accessed via FTP.

SSL and FTP access settings see chapter "Web server and user" under "FTP server settings / SSH server settings".

- Switch on syslog server Default = Deactivated.
- Syslog Server IP Default = Deactivated.
- Loglevel override Default = Off. Setting the log intensity for the syslog protocol. The higher the log level (1, 2, 3 or max), the more information output.

Important! After troubleshooting, the setting for the log level should always be set to the default value "Off". An activated log report can affect system performance and stability.

Set language

Set language

Content

Setting options under "Configuration" > "Set language" You can choose between Chinese, German, English, Spanish, French, Italian and Russian.


ALLNET
17:09:50
Hauptseite
Funktionen
Konfiguration
Module
ALL3500
Wählen Sie Ihre Sprache
中国的 - Chinese
Deutsch - German
English
Español - Spain
Français - French
Italiano - Italian
Русский - Russian
Eingaben speichern

Network settings

Network settings for the MSR devices

LAN setting

Set the IP network address and LAN parameters. Enter the Web browser, enter the IP address of the ALL3697 (default: 192.168.0.100). Setting options under "Configuration" > "LAN setting".

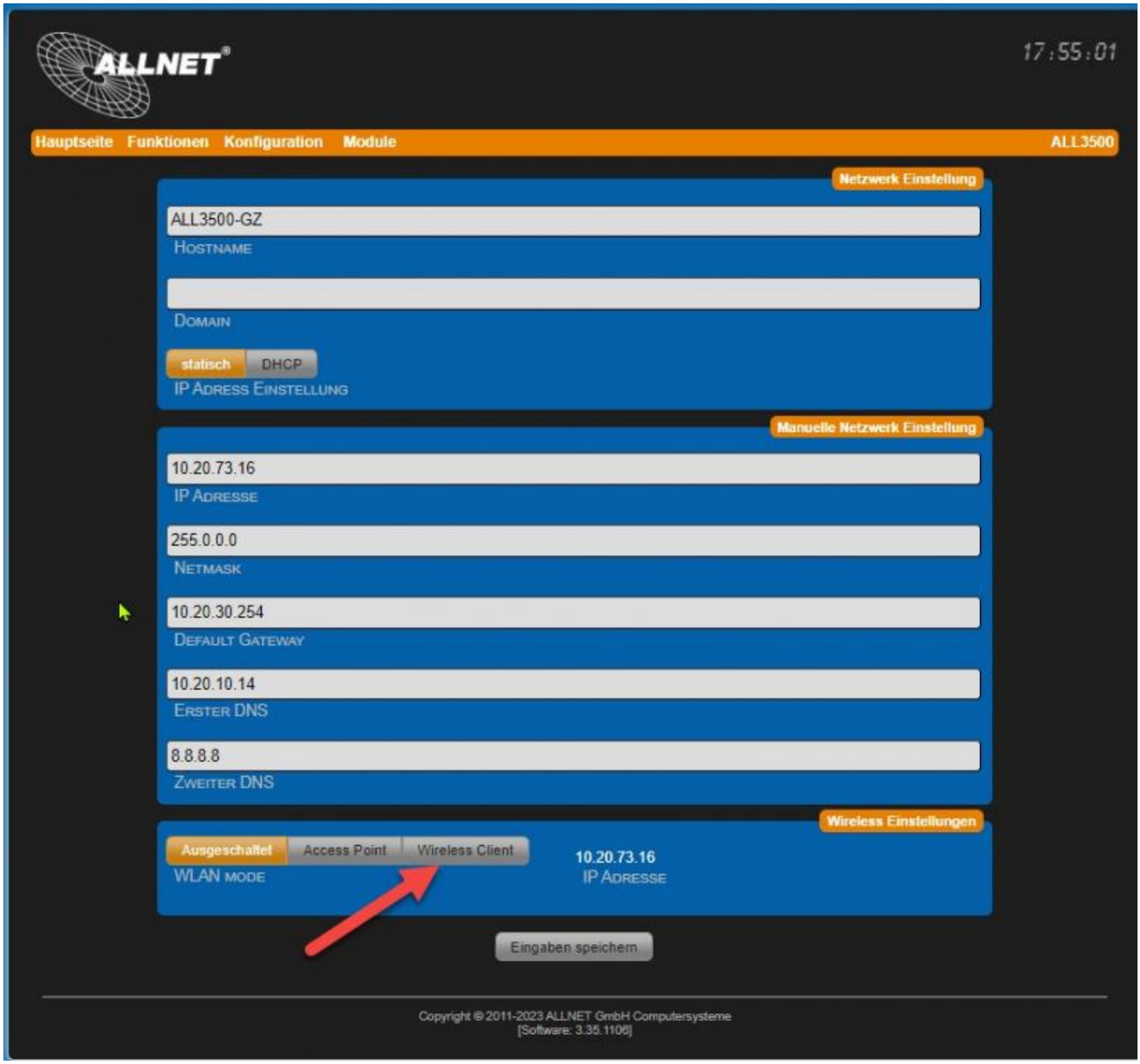
! The settings must match your existing network, ask your network administrator if necessary!

1. **Hostname** Here you give your MSR DEVICE a name with which it reports to the network. Only the following characters are valid: a-z, A-Z, 1-9 and hyphen (not to be used at the beginning or end). No special characters or spaces may be used. A maximum of 15 characters is possible.
2. **Domain** (only for static address assignment) To integrate the device into a domain, enter the domain name here. 3 **IP address setting** If "DHCP" is selected, the MSR DEVICE uses an IP setting assigned by the DHCP server, points 3 - 7 are omitted. With "static" (default), you must assign the address manually.
3. **IP addressIP address of the MSR DEVICE in the local network** (Please ensure that you do not assign an IP address twice (ask your network administrator if necessary).
4. **NETMASK subnet mask**, default: 255.255.255.0. The setting must match your network, ask your network administrator if necessary or use the same subnet mask that is set on the LAN port of your router.
5. **DEFAULT GATEWAY** Enter the default gateway here, usually the IP address of your router.
6. first DNS **Enter the address of your DNS server here. In home networks, this is usually the IP address of your router. 8** Second DNS** Default setting is 8.8.8.8 Please only change if there is a second DNS server in your internal network.

Confirm with "Save entries" after changing the parameters. The MSR DEVICE restarts automatically. After approx. 90 seconds, the MSR DEVICE should be accessible with the new parameters.

WLAN setting

Set the WLAN parameters. Enter the IP address of the device in the web browser. Setting options under "Configuration" > "Network settings" "WLAN Mode " on Wireless Client.



Select the WLAN operating mode. There are 3 options available:

Access point settings

- Access point: The device itself works as a WLAN access point. All devices in your LAN network can therefore be reached via WLAN.

- Wireless client: The device can be connected to an existing WLAN.

Set the access data for your private wireless network.

- SSID

Give the wireless network your own name, the so-called SSID. The following characters are valid: a-z, A-Z, 1-9, _-@. No spaces may be used. A maximum of 32 characters is possible.

- Channel

Select a channel from the drop-down menu. Try to find the largest possible channel distance to external access points with high transmission power (signal % display).

- WLAN AUTH MODE Select an encryption method (OPEN NONE, Shared WEB, WPAPSK-TKIP, WPAPSK-AES, WPA2PSK-TKIP, WPA2PSK-AES). We recommend using WPA2PSK-AES for high security.

- Cipher key

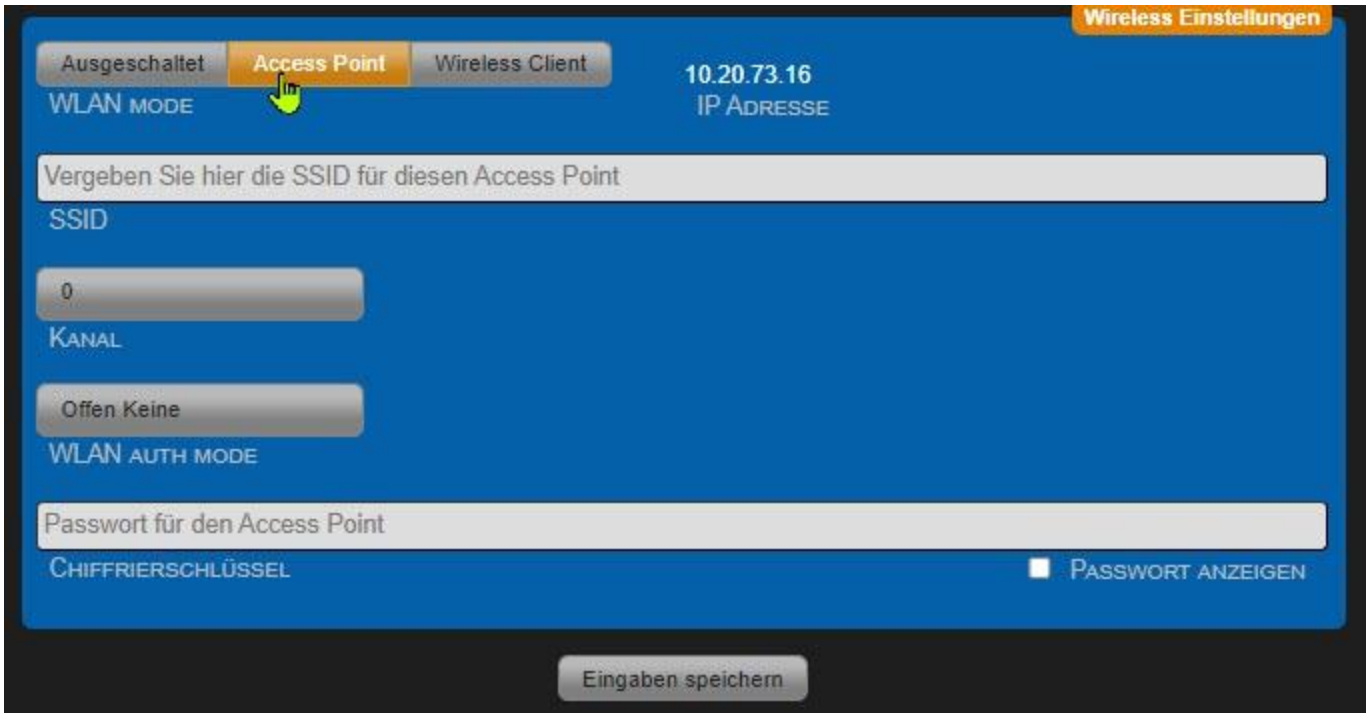
Select a key that ideally consists of letters, numbers and special characters. With "DISPLAY PASSWORD" you can visually check whether a typing error has crept in. After changing parameters, press "Save entries". The device restarts automatically.

- **SSID**

Give the wireless network your own name, the so-called SSID. The following characters are valid: a-z, A-Z, 1-9, _-@. No spaces may be used. A maximum of 32 characters is possible.

If you use this operating mode in conjunction with a LAN, the device serves as a WLAN access point. This allows other WLAN devices to be connected to your LAN.

This operating mode can also be used to control the device on its own without a LAN connection. E.g. from your cell phone via WLAN. It makes sense to activate the DHCP server for this operating mode.



Set the access data for your private wireless network.

- **SSID** Give the wireless network your own name, the so-called SSID. The following characters are valid: a-z, A-Z, 1-9, _-@. No spaces may be used. A maximum of 32 characters is possible.

Wireless client settings

! Important! If you use this operating mode, the LAN connection must be disconnected after saving the settings.

When operating as a wireless client, you can search the surrounding area for existing WLAN access points and display the results of the search by pressing the "Search access points" button. To simply accept the data of your WLAN, click on the "Select" button in the corresponding line. All data, with the exception of the encryption key, will be transferred.

The SSID, CHANNEL and WLAN AUTH MODE parameters are automatically adopted by pressing the "Select" button. The "CHIFFRIERSCHLÜSSEL" parameter must always be entered manually and must be identical to your already active WLAN. Alternatively, you can also manually set your access data for your private wireless network.

- SSID

entry must be identical to your WLAN.

- WIFI AUTH MODE Select the encryption method identical to your WLAN (OPEN NONE, Shared WEB, WPAPSK-TKIP, WPAPSK-AES, WPA2PSK-TKIP, WPA2PSK-AES). We recommend using WPA2PSK-AES for high security.

- CIPHER KEY

entry must be identical to your WLAN. With "DISPLAY PASSWORD" you can visually check whether a typing error has crept in. After changing parameters, confirm with "Save entries". The MSR device restarts automatically. Now disconnect the device from your LAN connection. A simultaneous connection of WLAN and LAN leads to interference in your network. After approx. 90 seconds, the ALL3697 should be accessible via WLAN with the new parameters.

DHCP server

DHCP Server

Content

Setting options under "Configuration" > "DHCP Server".

The MSR DEVICE can work as a DHCP server. Only activate this function if the MSR DEVICE is operated as a stand-alone access point. Attention: If this function is activated and the MSR DEVICE

is mistakenly connected to your LAN, this will result in malfunctions. For standalone operation, select an IP address that differs from the setting used in your existing LAN and WLAN, e.g. an address in the 192.168.100.xxx range. See also: http://de.wikipedia.org/wiki/Private_IP-Adresse

- DHCP Server ModeDisabled / Enabled (Default = Disabled).
- IP address range starts atThe automatic allocation of IP addresses starts with xxx.xxx.xxx.xxx.

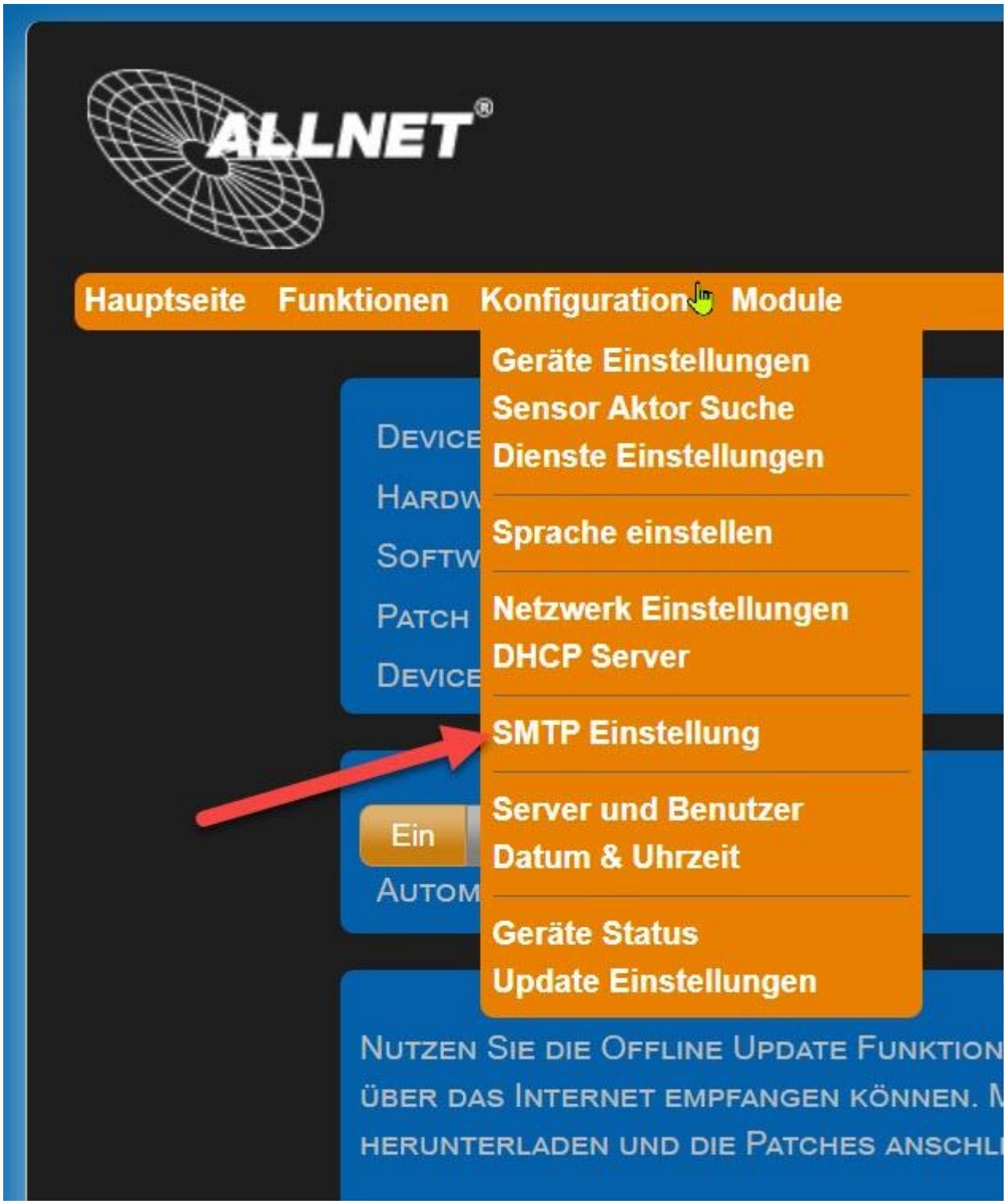
  ```
  Default = 192.168.0.110
  ```

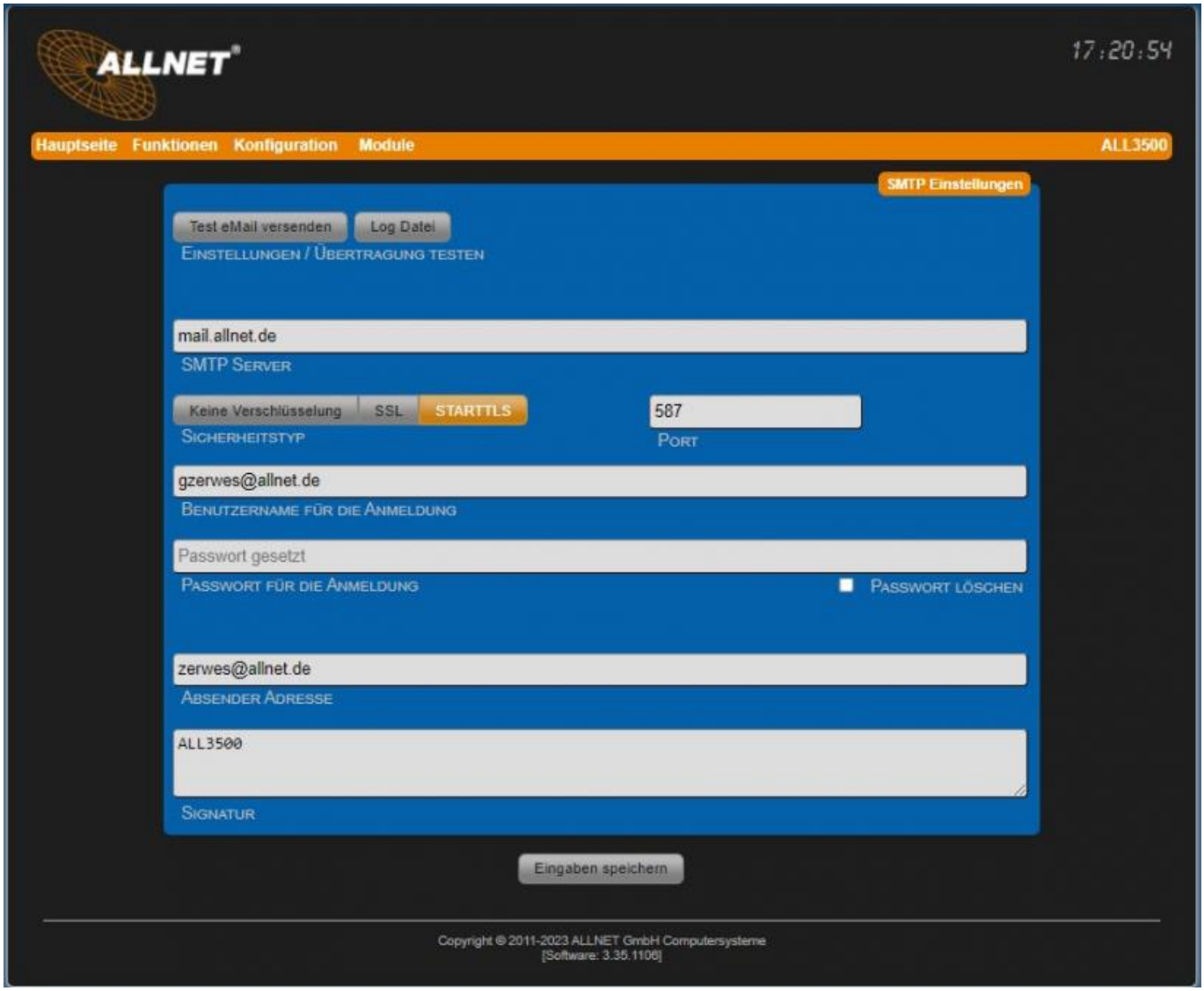
- IP address range ends atThe automatic allocation of IP addresses ends with xxx.xxx.xxx.xxx. Default = 192.168.0.149
- Netmask Default = 255.255.255.0 . Suitable for 192.168.xxx.xxx addresses.
- Gateway Not relevant in standalone mode. Otherwise your router address.
- DNS1 Your DNS server address. The router address for home networks. Not in standalone mode relevant.
- DNS2 Not relevant in standalone mode.
- DNS3 Not relevant in standalone mode.

SMTP Server

SMTP Server

Setting options under "Configuration" > "SMTP setting". It is possible for the device to send e-mails to a predefined e-mail address for various events.





- Test settings / transmission You can test your SMTP settings with the "Send test email" button. You can view the log file using the "Log file" button.

- SMTP server Enter IP address or mail server name with domain.

- Security type Many mail servers require encrypted transmission.

- No encryption (default port: 25)
- SSL (default port: 465)
- STARTTLS (default port: 587), default setting

- Port Port 25 is the standard port for SMTP without encryption. Port 465 is used for encrypted SMTP mails.

- User name for the login This user name must exist on the server.

- Password for the login Password must be entered.

- Sender address This is used for all outgoing e-mails.

- Signature Option to enter a signature that is attached to the e-mail text. Note: Only authenticated registrations are permitted.

Server and users

Server and user

"User settings" tab

In the User Manager, you can create a maximum of 10 users and assign corresponding rights. This includes authorizations for FTP and SSH access as well as the assignment of rights to allow other devices remote access to this device. It does not make sense to set up a standard user alone, as otherwise all websites will continue to be unprotected due to the open administrator access.

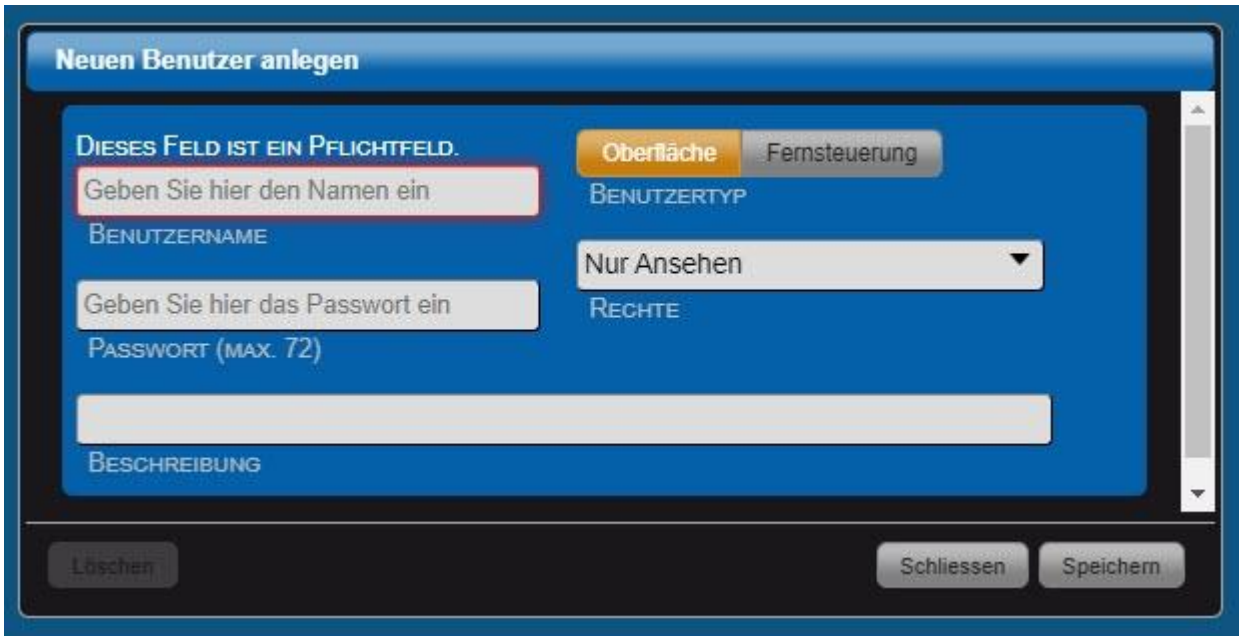
The users "ftp" and "root" are available by default and can be edited using the "pencil" button on the right.

- Username ftp This user can access all files on the device via the FTP protocol. Write user name "ftp" in lower case when logging in for the first time. The password is transmitted unencrypted.

- User name root Advanced users can access the Linux operating system console directly. When logging in for the first time, write the user name "root" in lower case.

! These passwords should definitely be changed!

Additional users can be added using the "+" button (bottom right). Different rights are available depending on the user type "Interface" or "Remote control".



- User name Enter a user name here.

- Password You must enter a password here.

- Description Description is for information only.

- User type The user types "Surface" and "Remote control" are available.

- Rights Depending on the user type, you can set the rights here to varying degrees. Rights for user

type "Surface":

- View only (viewing of the surface possible)
- View & evaluate (querying and evaluating measured values and statuses possible)
- Viewing & switching (querying measured values and statuses as well as switching actuators/outputs possible)
- Viewing, switching & evaluating (querying and evaluating measured values and statuses as well as switching actuators/outputs is possible) --Viewing, switching, evaluating & functions (querying and evaluating measured values and statuses as well as switching actuators/outputs, access to the "Functions" menu is possible)
- Administrator (administrator has full rights on the device) Rights for user type "Remote control":

Under "Main page" > "Overview", all pages of the web interface are deactivated. The "Functions" menu item is also hidden. The device can now only be controlled remotely .

- View only (querying of measured values and statuses possible)
- Viewing & switching (querying measured values and statuses as well as switching actuators/outputs possible)

"Access control" tab

Access to the web interface and the web pages with configuration options is defined via the rights in the "User settings" tab. To activate access control for the interface, a user with administrator rights must first be created.

If remote control is activated, the values of individual/all sensors can be queried and actuators/outputs switched from another system using HTTP GET commands.

- Access control To activate access control for the user interface, a user with administrator rights must first be created.

- Switch on remote control Activate remote control for read and/or write access to the device. The rights are set in the "User settings" tab.

- Slave mode When "Slave Mode" is activated, all pages of the web interface under "Main page" > "Overview" are deactivated. The "Functions" menu item is also hidden. The device can only be controlled remotely.

"Server settings" tab

In this tab, access to the integrated server can be controlled via HTTP, FTP and SSH protocol.

- Operating mode with / without SSL

- http:// (default: without encryption)
- https:// (with SSL encryption)

- HTTP port number Default port numbers: http:// = 80 / https:// = 443

- Activate or deactivate FTP server Default = deactivated

- FTP port number FTP port number: 21 (default)

- Activate or deactivate SSH server Default = deactivated, (SSH port number: 22).

Date and time

Date and time

Content

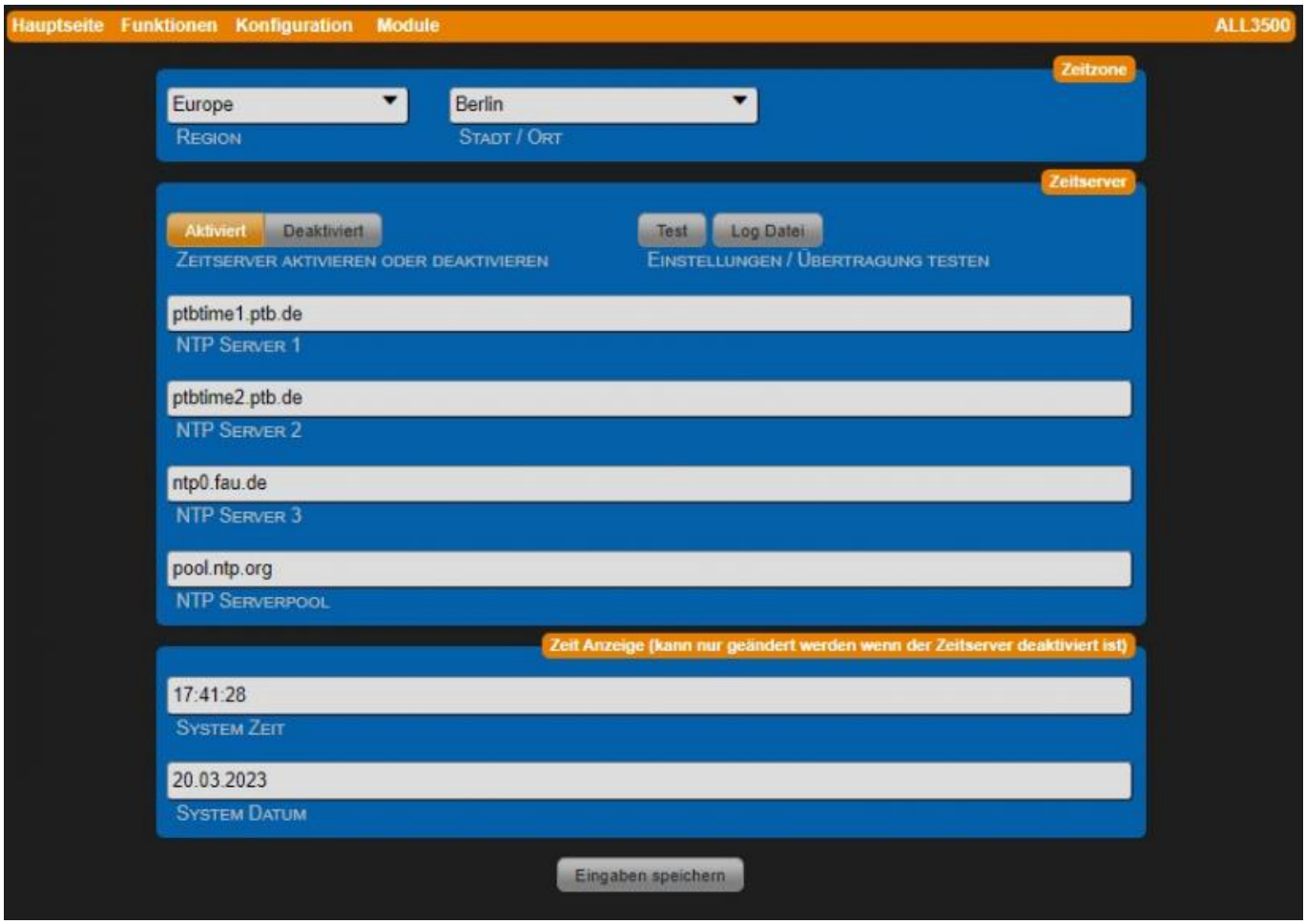
Setting options under "Configuration" > "Date and time".

The device usually synchronizes its system time via an NTP server. The NTP time is queried during the boot process and is updated every 24 hours. The query is made via port 123, which must be

opened "stateful" on the outgoing firewall. An internal network time server can also be used. Your router may also work as an NTP server. This must then be entered under "NTP server 1".

To set the time correctly, the device must have a functioning Internet connection or access to an NTP server!

! Note: Setting the system time manually is generally not very useful, as the device does not have a battery buffer for the real-time clock and the system time is therefore set to 01.01.1970 00:00 after each restart. Please ensure that the time server is always available and correctly set.



The corresponding time zone is determined from the settings for region and city/town.

- Region Regions to choose from: Africa, America, Antarctica, Asia, Atlantic, Australia, Europe, Indian, Pacific, All.

- City / O Town Selection of a city depending on the region.

- Activate or deactivate time server Default = Activated.

- NTP Server 1-3 Selection of possible time servers. Alternatively, set the local time server (router) in the first position.

- NTP server pool Address of an NTP server pool, e.g. pool.ntp.org.

- System time Manual entry of the system time is only possible if the time server is deactivated.

- System date Manual entry of the system date is only possible if the time server is deactivated.

Device status

Device status

Setting options under "Configuration" > "Device status". The website provides an overview of the system configuration, configurations can be saved and loaded. If necessary, you can reset the device to factory settings.

- Version numbers at a glance: Software, patch, hardware and MAC address for LAN and WLAN.

- System info provides information about memory usage, system time and operating time.

- Services overview shows installed services and their status.

The following actions are possible: - Save configuration Save a backup file of the device configuration (*.cfg).

- Configuration loading / search Loads the desired configuration into the device without activating it immediately.

- Upload Activates the configuration loaded into the device with "Load configuration".

- Restart System is restarted. A restart takes approx. 120 seconds.

- Factory setting Attention: All settings will be reset. A confirmation prompt must be confirmed.

Update settings

Update settings

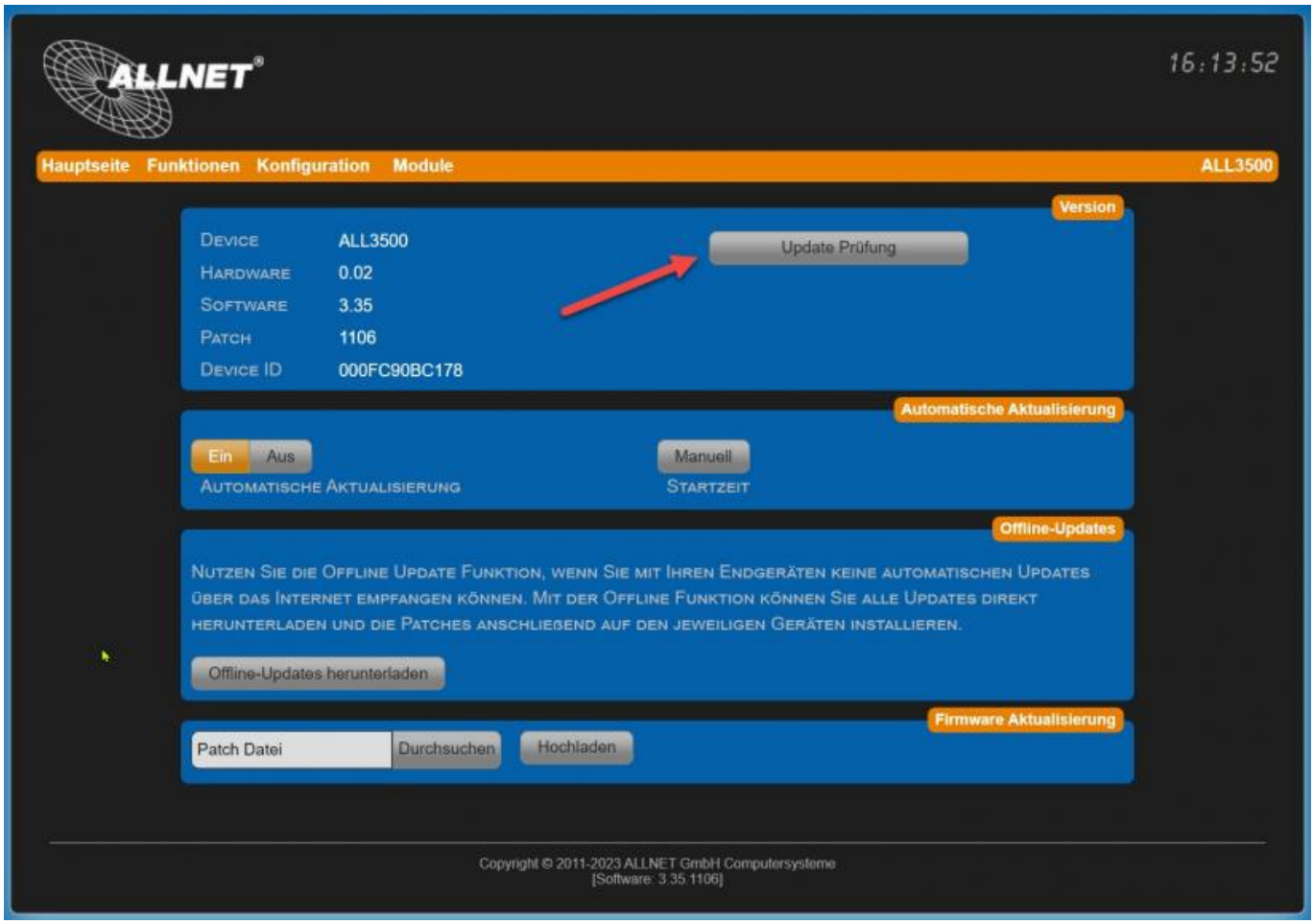
! Very important! The device needs Internet access, or you can download the updates manually. The patches must be installed in the correct order!

Update check As soon as the device is connected to the Internet, updates can be downloaded automatically from the ALLNET server! There may also be several updates. Start the check in the "Configuration" > "Update settings" menu with the "Update check" button.

! Caution! Never disconnect the device from the mains or restart it during initial commissioning or during an update process! If an update fails, the device may no longer be accessible.

If an update is found, start the installation with "Download & Install".

Further information on the topic of update settings can be found in section 8.11 on page 93.

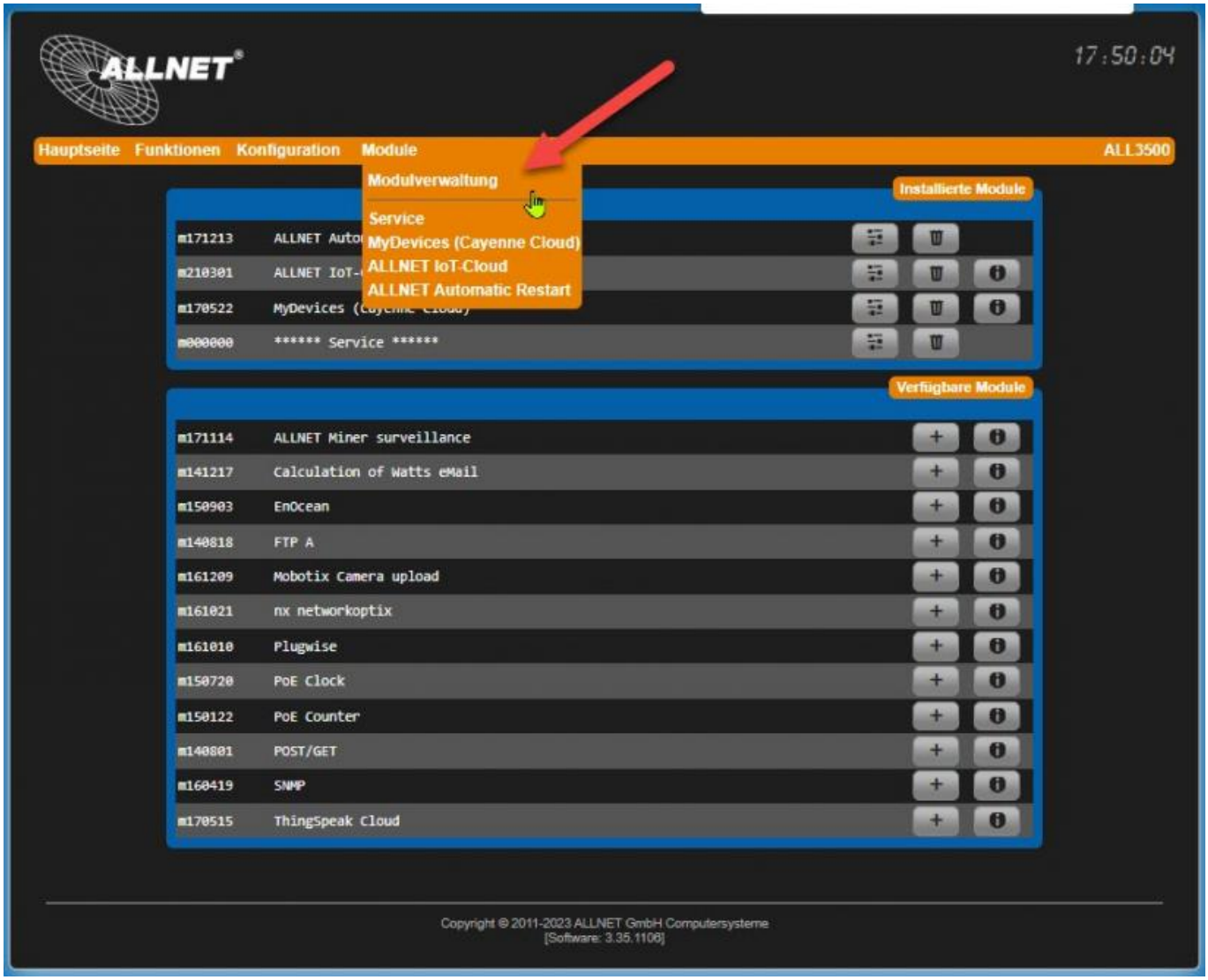


! Download offline updates "Download Link" ! ! https://update.allnet.de/offline-updates.php ! !

Modules

Modules

Software modules can be installed free of charge on the MSR devices. For example, the modules for the **ALLNET IoT Cloud**, which can be used free of charge for MSR devices.



[TOC]

Module management

Module management

Software modules are small programs that allow you to add certain functions. As our MSR series has limited memory, only the programs that are absolutely necessary should be installed.

Available software modules

- ALLNET Automatic Restart
- ALLNET IoT Cloud
- MyDevices (Cayenne Cloud)
- Service
- ALLNET Miner Surveillance
- Calculation of Watts email
- EnOcean
- FTP A
- Mobotix Camera Upload
- nx networkoptix
- Plugwise
- POE Clock
- POE Counter
- POST/GET
- SNMP
- ThinkSpeak Cloud

Module overview

Module overview

Software modules are small programs that allow you to add certain functions. As our MSR series has limited memory, only the programs that are absolutely necessary should be installed.

[TOC]

ALLNET IoT Cloud

ALLNET IoT Cloud

ALLNET MSR goes IoT - MSR quick start guide Before you can use the ALLNET MSR end devices in the ALLNET IoT Cloud, you must first install the ALLNET IoT module in the ALLNET I&C control center(s) and select there which sensors/actuators in the ALLNET IoT Cloud should/may.

Step 1: Installing the ALLNET IoT module in one or more ALLNET I&C control panels.

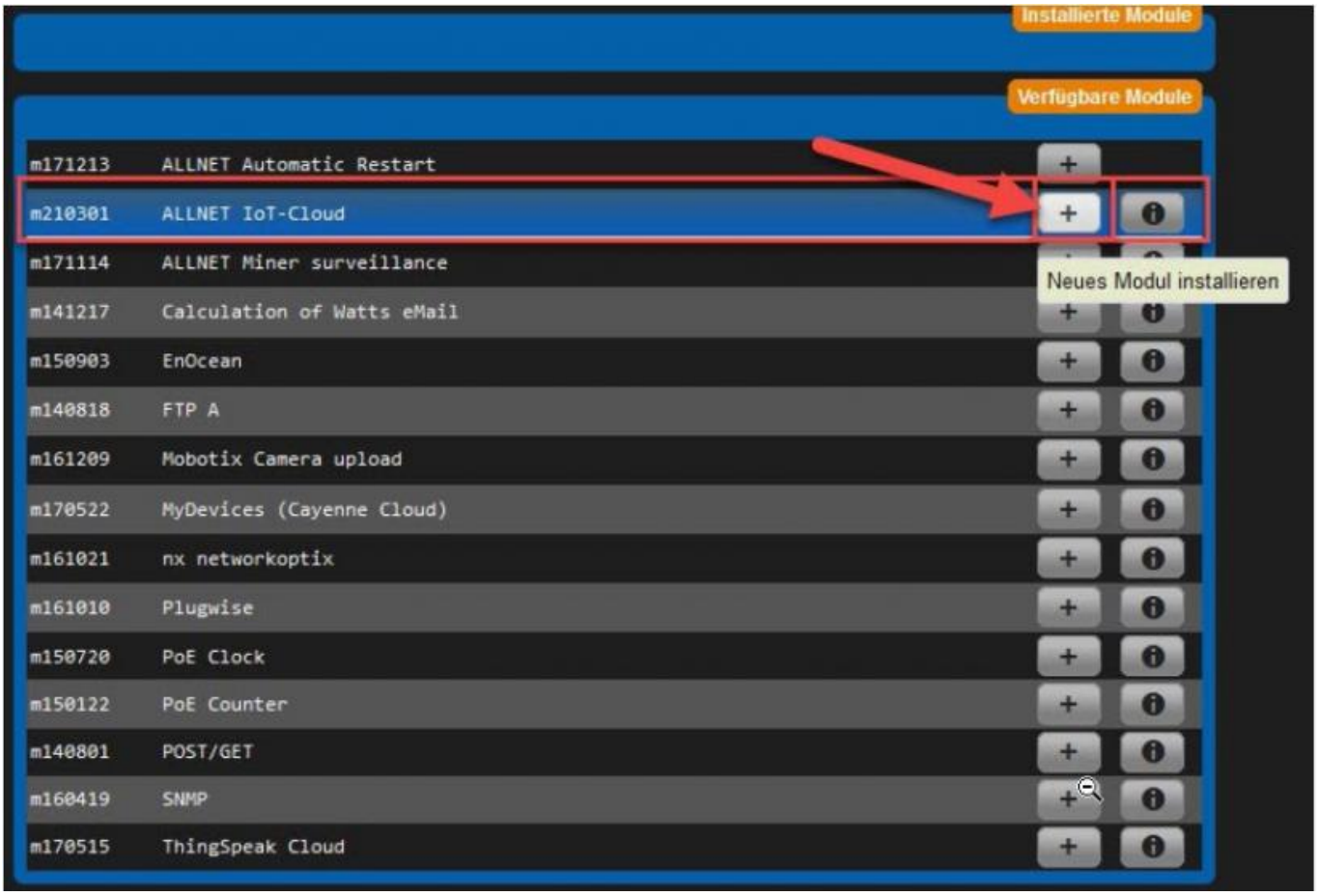
Requirements:

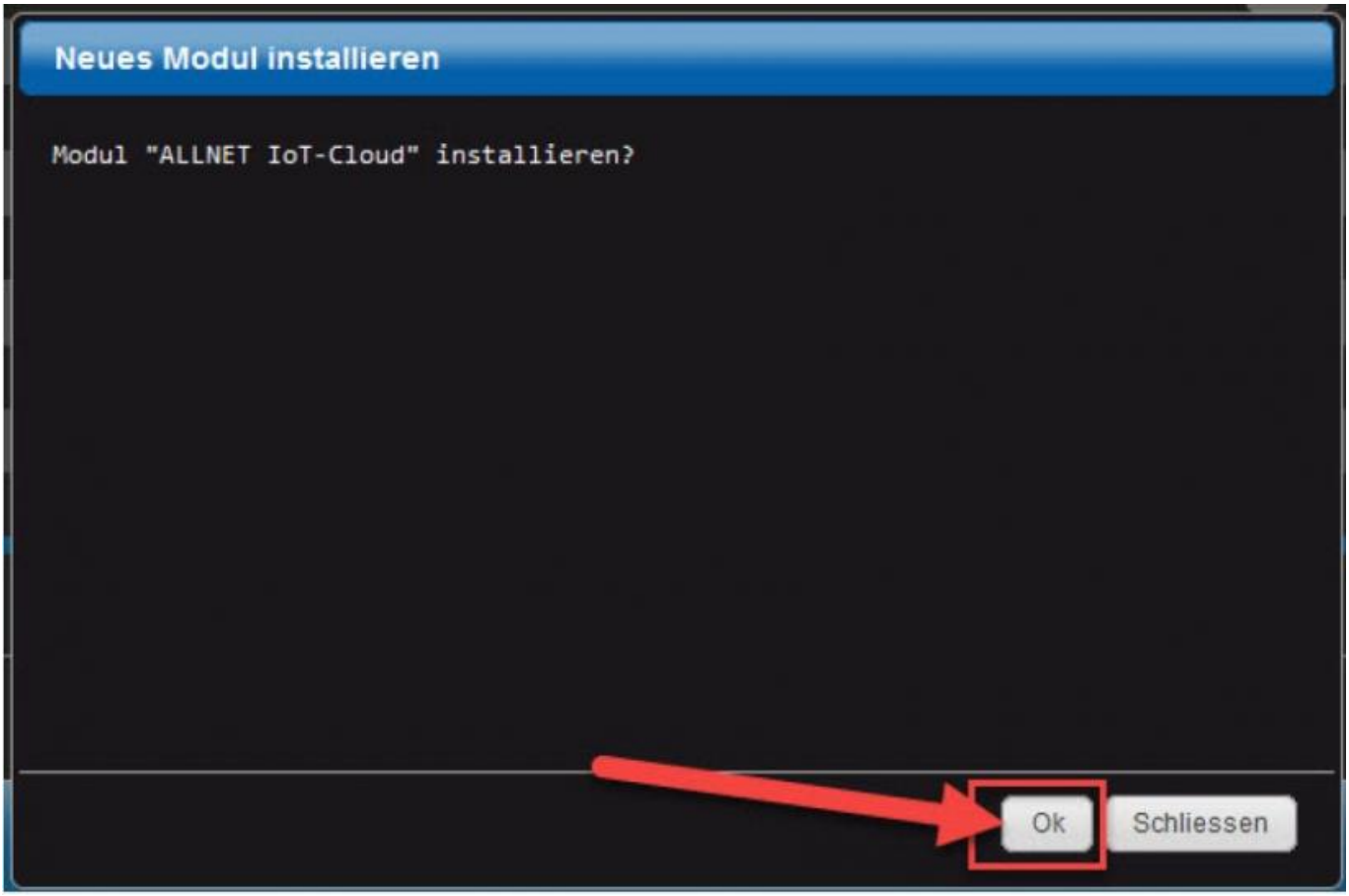
Account at https://iot.allnet.de/de/register We do not recommend using this module with the ALL3072 as the memory and performance are insufficient.

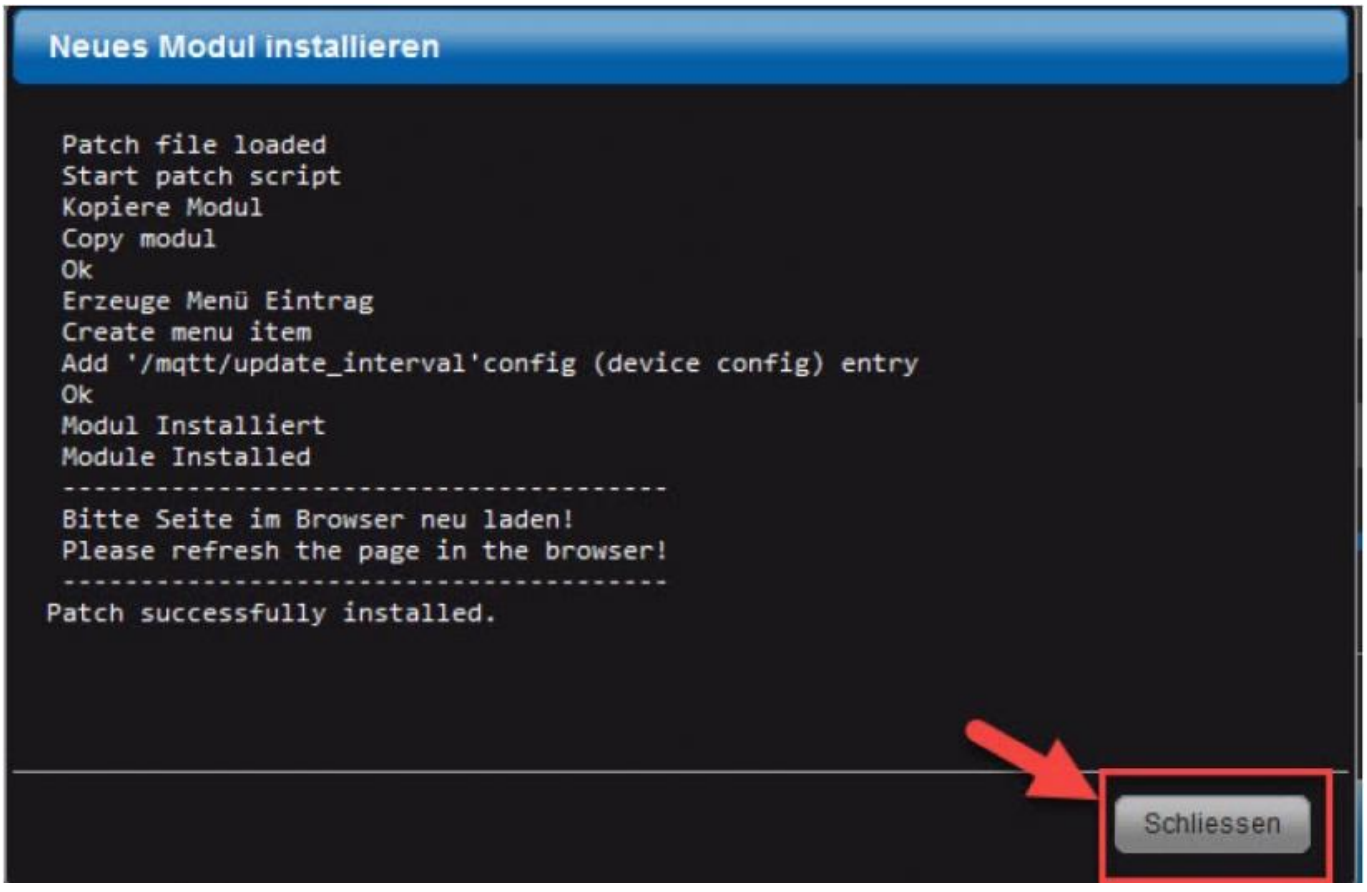
This module sends data and reacts via the secure MQTT protocol and the ALLNET server located in Germany.

1. open the browser of your MSR central unit and click on the "Modules" tab, then on "Module management"

2. install the current ALLNET IoT Cloud module by clicking on the "+" button

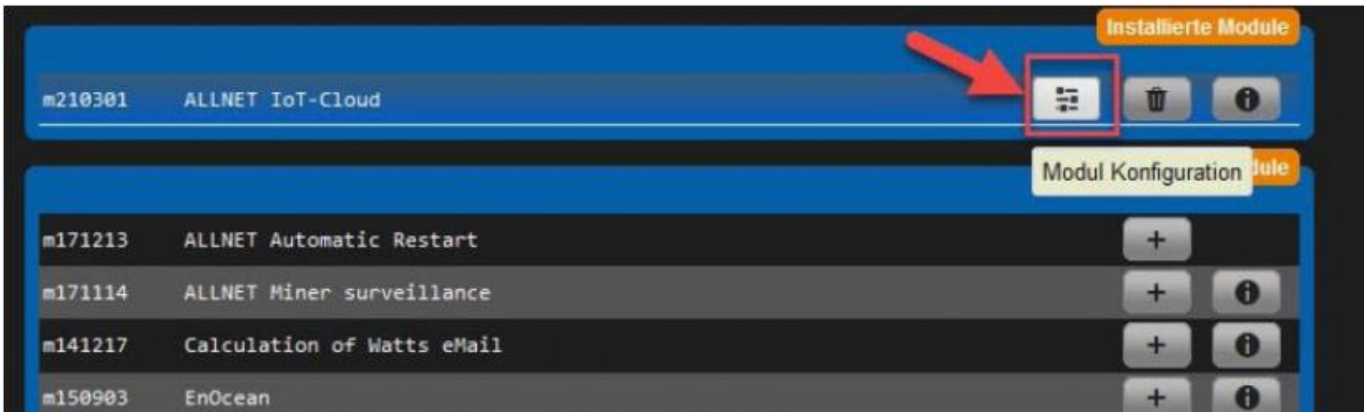






Step 2: Configuration of the ALLNET IOT Cloud Module.

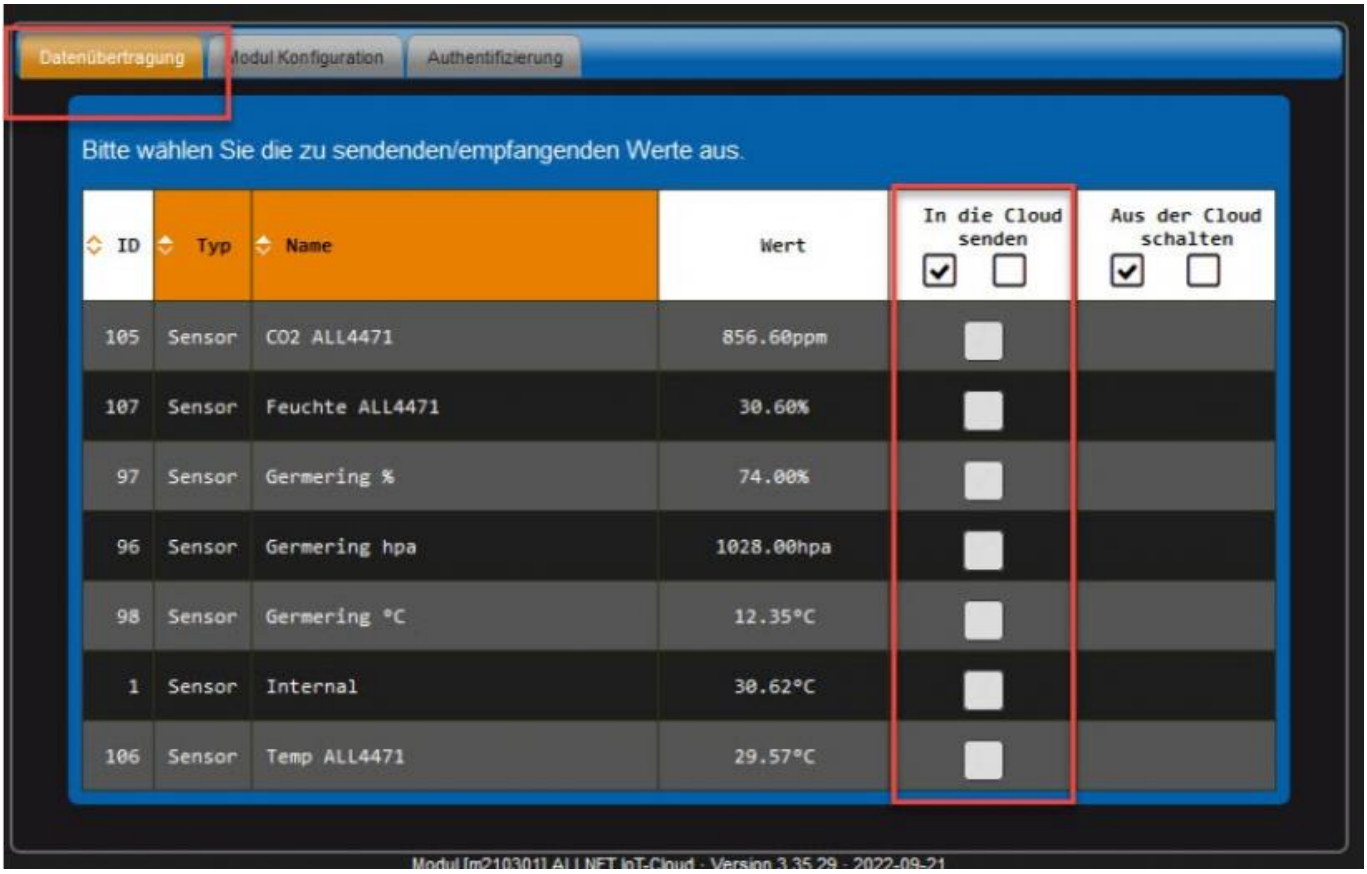
1. open the browser in your MSR control center and then click on the "Modules" tab on "Module management". To configure the module, click on the first icon "Configuration module"



2. in the ALLNET IoT module you now have 2 options in the "Authentication" tab: Left: The Add device to an existing account at http://iot.allnet.de or right: Can you create an account directly at http://iot.allnet.de

3. once you have decided on a version, you must familiarize yourself with the correct Log in with your account data. The device automatically logs in to our MQTT server and generates a unique ID which is then used for communication.

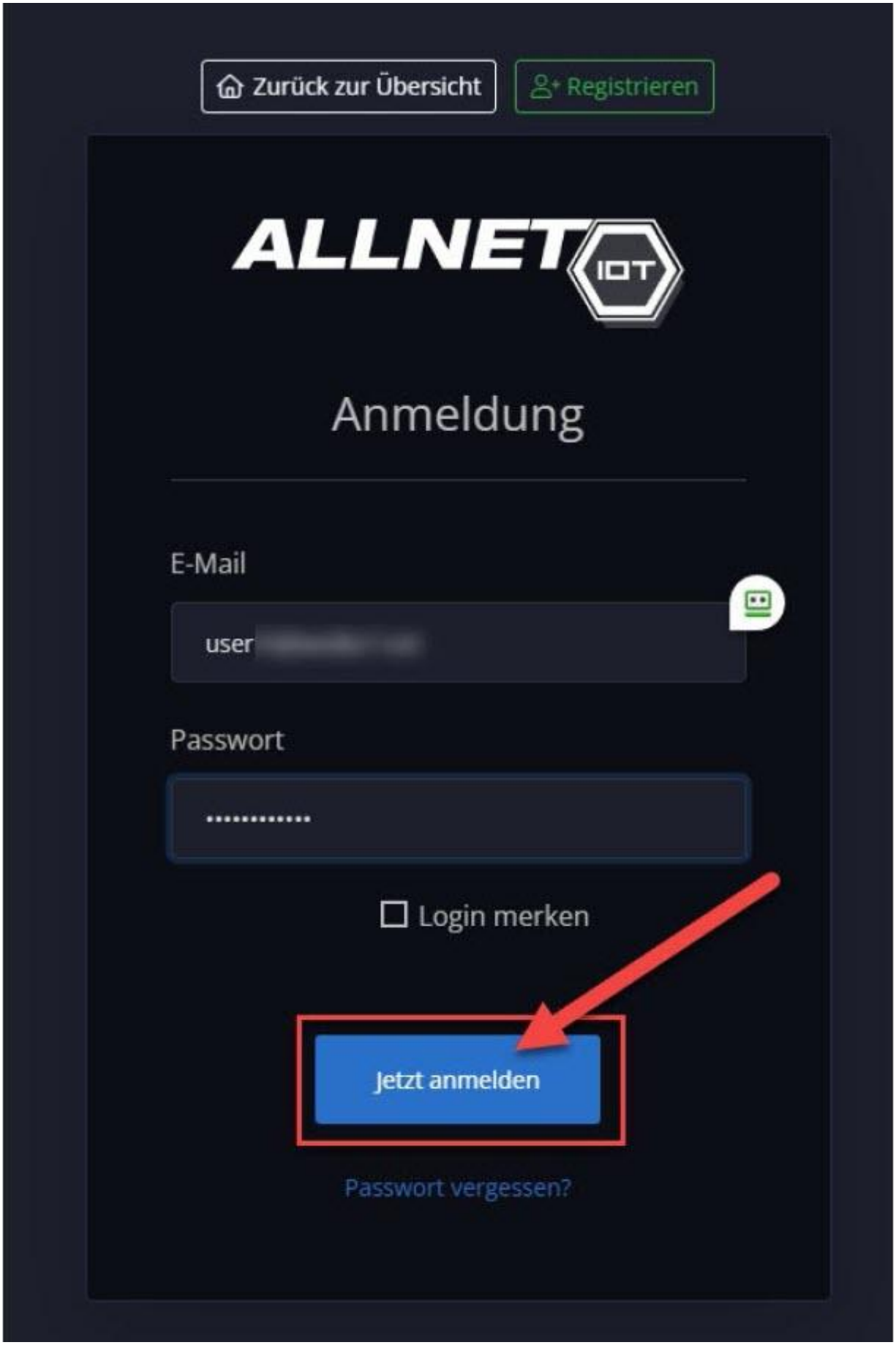
4 In the "Data transmission" tab, you decide which sensors and actuators are to be transmitted to the cloud. and which should/may be switched from the cloud.



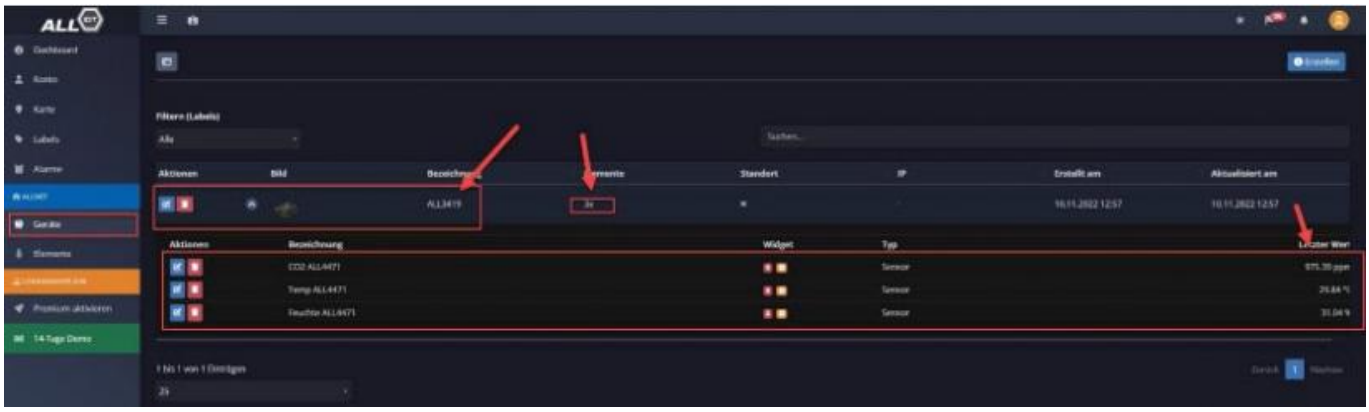
5. check the box for the sensors that should be accessible from the cloud.

Step 3: Check in your account whether the device and the elements have now been created. are.

1. open the browser and visit the login page https://iot.allnet.de/de/login



2. open the browser and visit the login page https://iot.allnet.de/de/login Check under "ALLNET devices" whether this control center has been created.



3. under the "Elements" tab, you can see whether your 3 sensors have been created. are.

We hope you enjoy using the ALLNET IoT Cloud.

Bitmain Miner Status

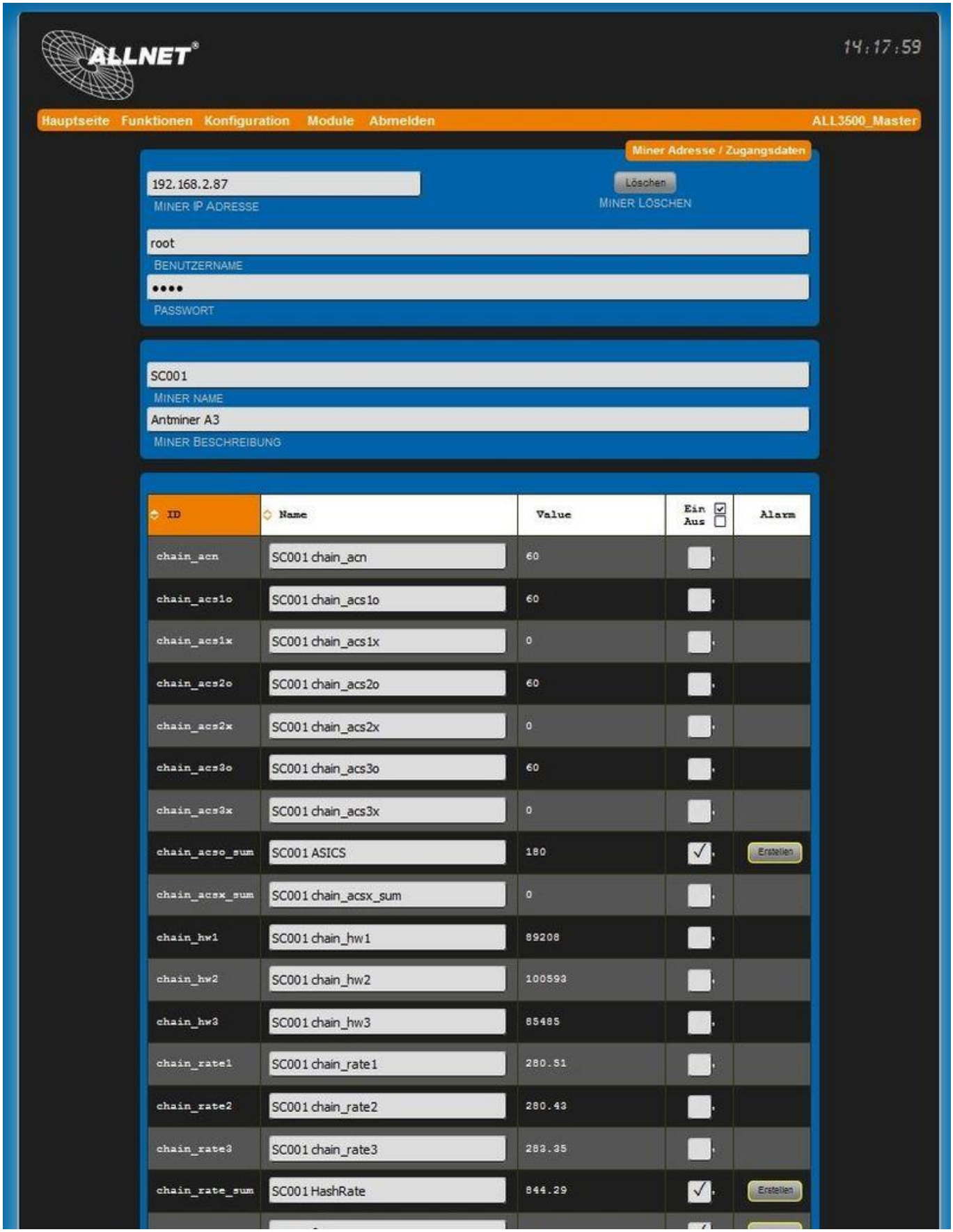
Bitmain Miner Status

Bitmain Miner Status The Miner Status module reads the values of the Bitmain Antminer D3/L3+/S9/A3 and lists the available sensors. You can activate the desired sensors in our module, which are then created as sensors on the overview page. Of course, the sensors can then be displayed and controlled individually in the subpages and in the associated rules, just like all other sensors. An e-mail address for alarm messages can also be created in the module, which then automatically creates a rule under "Functions - Actions".

Prerequisite:

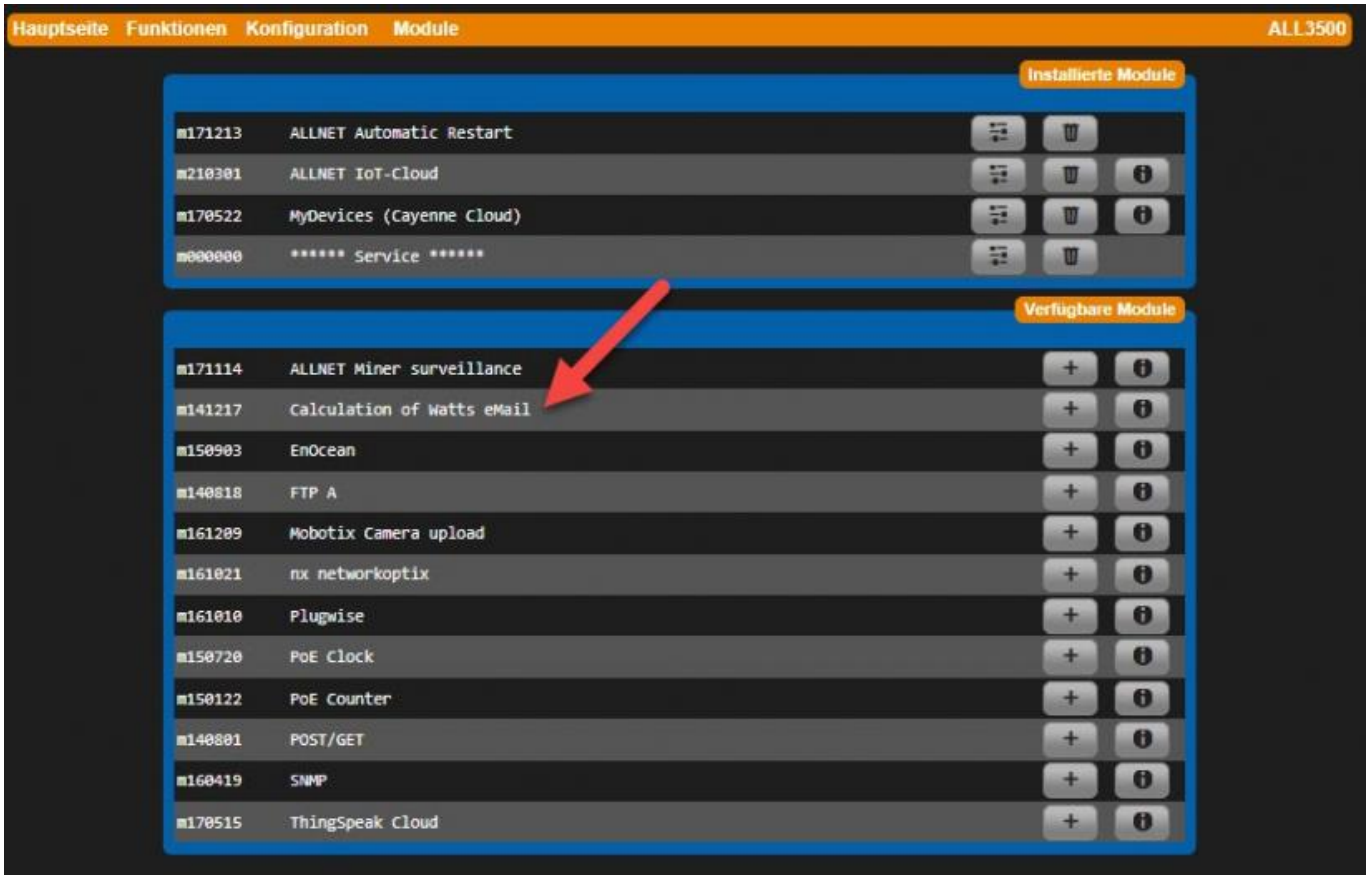
Currently supported are Antminer D3, Antminer L3+, Antminer S9 & Antminer A3 ALLNET MSR control panel e.g. ALL3419 / ALL3500 / ALL3505 / ALL4500 & / ALL5000 is required Platform-independent


ALLNET
14:04:47
Hauptseite Funktionen Konfiguration Module Abmelden
ALL3500_Master
Sensoren Office Berlin Carport_Garage Intern Stromverbrauch Miner Status
LTC001a ASICS
288.00
LTC001a Temp Max
40.00 °C
LTC001a HashRate
653.57 M/H
LTC001a fan1
1770.00 /m
LTC001a fan2
4230.00 /m
LTC002a ASICS
288.00
LTC002a Temp_max
37.00 °C
LTC002a HashRate
654.04 M/H
LTC002a fan2
4140.00 /m
LTC002a fan1
3930.00 /m
SC001 ASICS
180.00
SC001 temp2_max
73.00 °C
SC001 HashRate
819.16 M/H
SC001 fan1
6000.00 /m
SC001 fan2
6030.00 /m
LTC001 Watt
LTC001 Watt
W
1124.70
LTC002 Watt
LTC002 Watt
W
1149.00
SC001 A3 Watt
SC001 A3 Watt
W
1550.40
Hashrate L3+ Total
1307.61 M/H
Hashrate A3 Total
819.16 M/H
Copyright © 2011-2018 ALLNET GmbH Computersysteme
[Software: 3.35.1083]


ALLNET
14:17:59
Hauptseite Funktionen Konfiguration Module Abmelden
ALL3500_Master
Miner Adresse / Zugangsdaten
192.168.2.87
MINER IP ADRESSE
Löschen
MINER LÖSCHEN
root
BENUTZERNAME
PASSWORT
SC001
MINER NAME
Antminer A3
MINER BESCHREIBUNG
ID
Name
Value
Ein
Aus
Alarm
chain_acn SC001 chain_acn 60
chain_acs1o SC001 chain_acs1o 60
chain_acs1x SC001 chain_acs1x 0
chain_acs2o SC001 chain_acs2o 60
chain_acs2x SC001 chain_acs2x 0
chain_acs3o SC001 chain_acs3o 60
chain_acs3x SC001 chain_acs3x 0
chain_acso_sum SC001 ASICS 180 Erstellen
chain_acsx_sum SC001 chain_acsx_sum 0
chain_hw1 SC001 chain_hw1 89208
chain_hw2 SC001 chain_hw2 100593
chain_hw3 SC001 chain_hw3 85485
chain_rate1 SC001 chain_rate1 280.51
chain_rate2 SC001 chain_rate2 280.43
chain_rate3 SC001 chain_rate3 283.35
chain_rate_sum SC001 HashRate 844.29 Erstellen

Calculation of watts with subsequent email dispatch

Calculation of watts with subsequent email dispatch



E-mails are sent with totals according to specifications.

Prerequisite:

Only works with virtually created sensors:

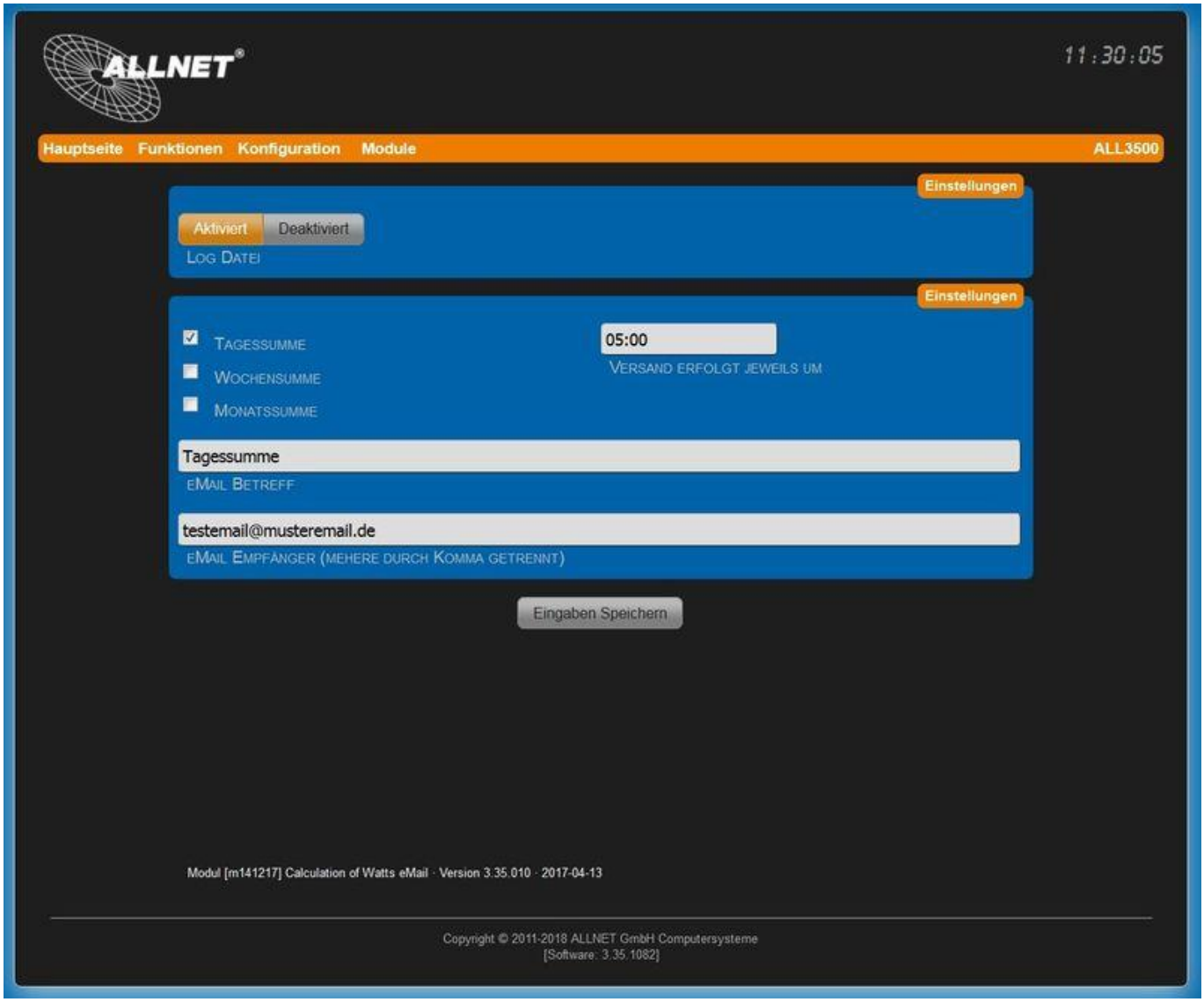
"Calculation from watts" "Calculation of pulse counter" Only one month can be evaluated at a time, a cross-month evaluation is not possible! In addition, the evaluation can also be queried remotely via the Internet at any time.

Quick guide: Quick guide DE with numerous examples

API description

Beschreibung der API DE

Beschreibung der API EN


ALLNET
11:30:05
Hauptseite
Funktionen
Konfiguration
Module
ALL3500
Einstellungen
Aktiviert
Deaktiviert
LOG DATEI
Einstellungen
TAGESSUMME
WOCHENSUMME
MONATSSUMME
05:00
VERSAND ERFOLGT JEWEILS UM
Tagessumme
EMAIL BETREFF
testemail@musteremail.de
EMAIL EMPFÄNGER (MEHERE DURCH KOMMA GETRENNT)
Eingaben Speichern
Modul [m141217] Calculation of Watts eMail · Version 3.35.010 · 2017-04-13
Copyright © 2011-2018 ALLNET GmbH Computersysteme
[Software: 3.35.1082]

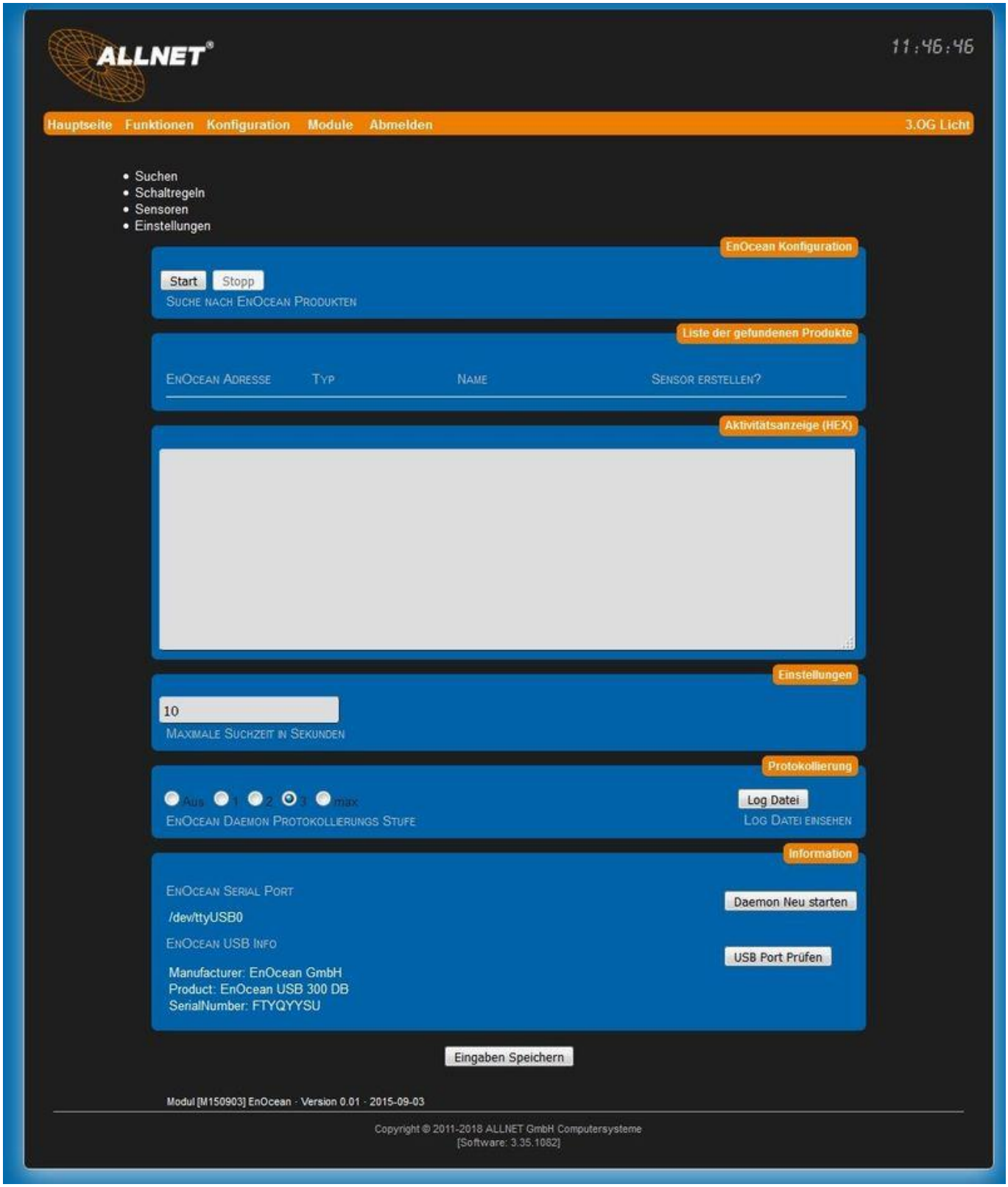
EnOcean

EnOcean

The EcOcean module supports the connection of EnOcean radio devices (without batteries) and is available for all MSR control centers with USB connection.

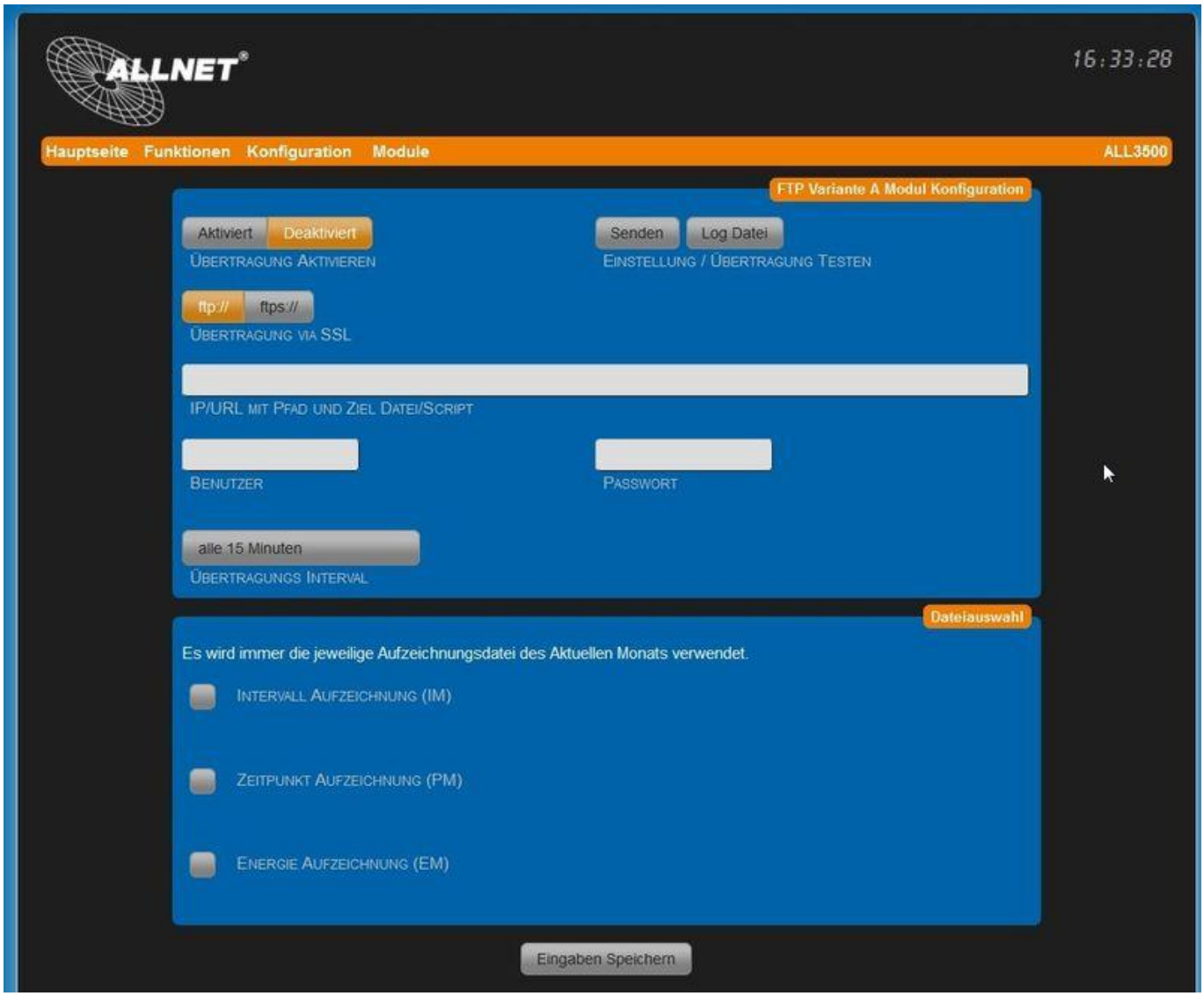
These EnOcean products are currently supported:

Battery-free radio module PTM210 https://www.enocean.com/de/enocean_module/ptm-210/ Battery-free STM 330 temperature sensor radio module and compatible "a5" https://www.enocean.com/de/enocean_module/stm-330/


ALLNET
11:46:46
Hauptseite Funktionen Konfiguration Module Abmelden 3.OG Licht
Suchen
Schaltregeln
Sensoren
Einstellungen
EnOcean Konfiguration
Start Stopp
Suche nach EnOcean Produkten
Liste der gefundenen Produkte
EnOcean Adresse Typ Name Sensor erstellen?
Aktivitätsanzeige (HEX)
Einstellungen
10
Maximale Suchzeit in Sekunden
Protokollierung
Aus 1 2 3 max
EnOcean Daemon Protokollierungs Stufe
Log Datei
Log Datei einsehen
Information
EnOcean Serial Port
/dev/ttyUSB0
Daemon Neu starten
EnOcean USB Info
USB Port Prüfen
Manufacturer: EnOcean GmbH
Product: EnOcean USB 300 DB
SerialNumber: FTYQYYSU
Eingaben Speichern
Modul [M150903] EnOcean - Version 0.01 - 2015-09-03
Copyright © 2011-2018 ALLNET GmbH Computersysteme
[Software: 3.35.1082]

FTP A

FTP A - Upload to FTP server



The FTP A module can be used to store data on any FTP server. The respective recording file of the current month is always used and stored.

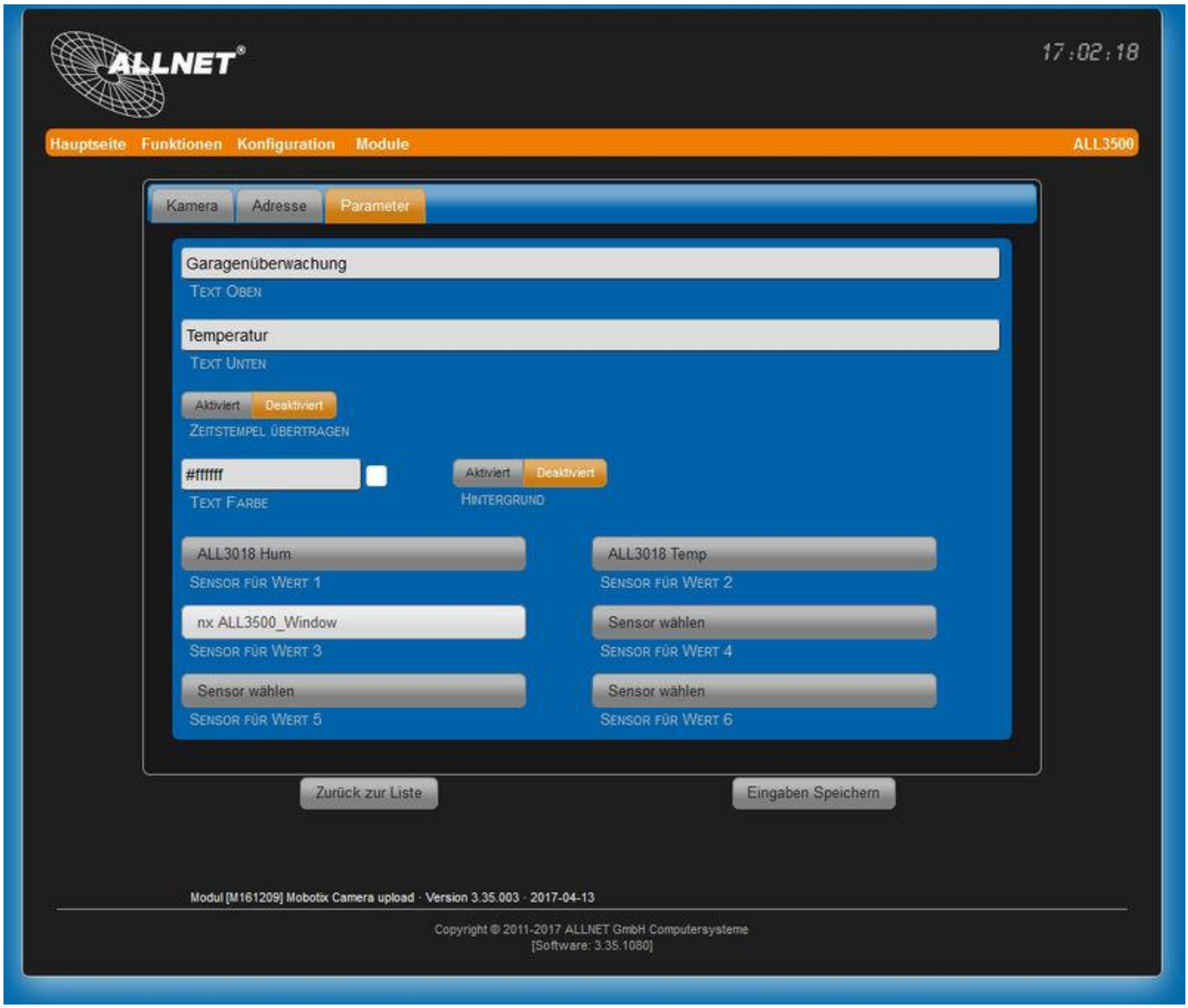
Mobotix Camera Upload Module

Mobotix Camera Upload Module

Displays the values directly in the Mobotix camera interface. Mobotix provides an API for the integration of text variables.

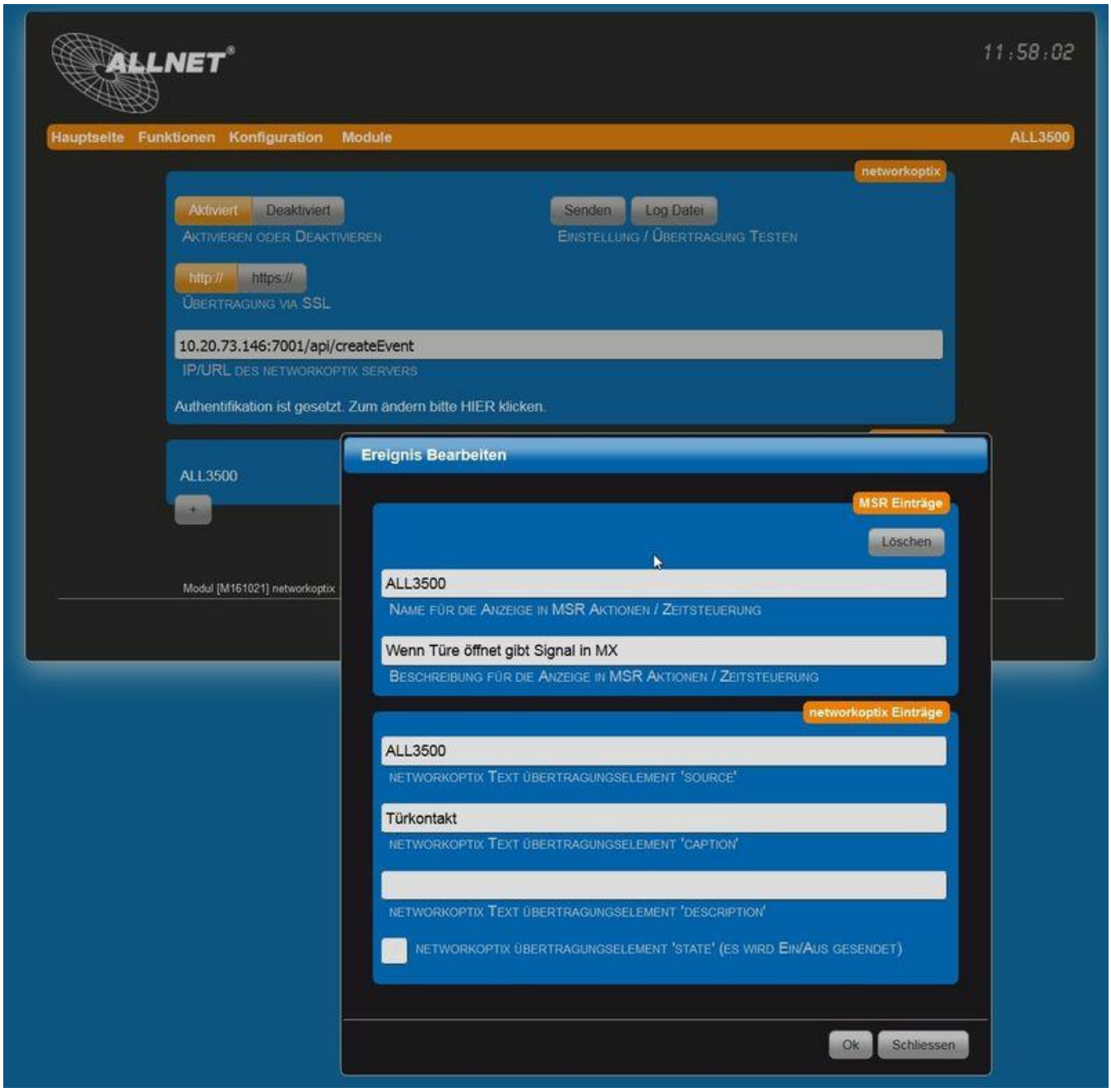
Prerequisite:

Mobotix camera from M10 and higher ALLNET MSR control panels from software 3.35 and higher



NX Networkoptix

NX Networkoptix



The Networkoptix software module makes it possible to generate a "Generic Event" within the Networkoptix NX Witness software. The generated event can then be used to trigger various actions within the software, such as a panic alarm.

To illustrate this, you can find further information and a video on the topic of combined automation here: http://www.allnet.de/de/allnet-brand/solutions/complete-solutions/combined-automation/

You can also find more information on this on our "Combined automation" solution page

! ATTENTION: As of version 5.0, digest / basic authentication must be explicitly activated for the user in the network optix

Outdated authentication in Nx Meta/NxWitness HTTP Basic and Digest as well as URL-based authentication can only be used if they have been activated for specific users. API requests that require the owner's password will not work with the deprecated authentication methods.

The owner can check whether the obsolete methods are activated for a user: https://localhost:7001/rest/v1/login/users/{username}

To activate digest authentication for a user:

- Open Main menu > User administration.
- Click on a user to edit their authorizations.
- Click on the More options icon and click on Allow digest authentication for this user.

Plugwise

Plugwise - Circles

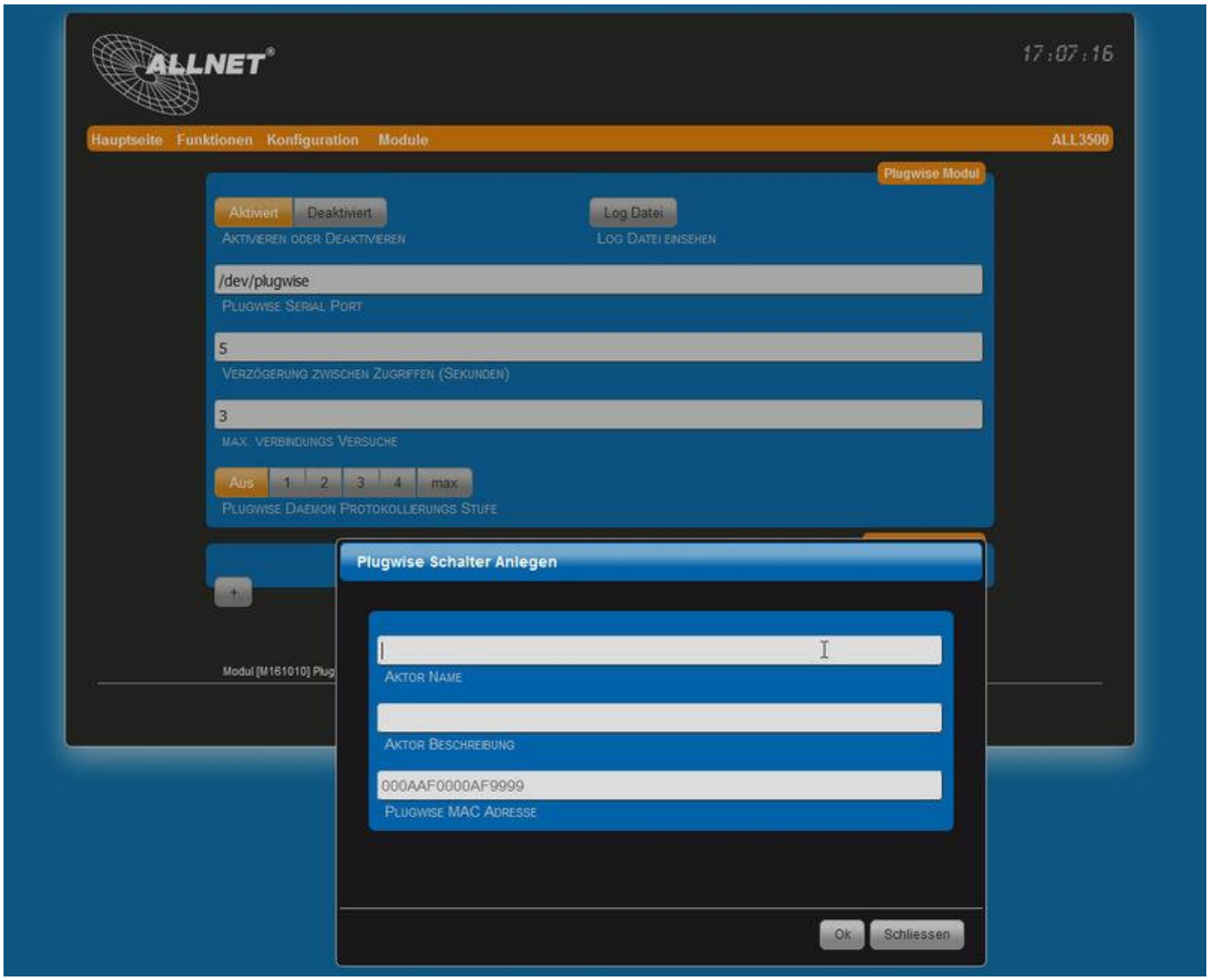
Integration of the Plugwise Circle and Circle+ with associated dongle = Plugwise Home Start
https://www.plugwise.com/

https://www.youtube.com/user/Plugwise/videos

As each Plugwise Circle has its own ID code, the ID code can be used here to switch the sockets. Both switching and the power consumption of the connected devices can be displayed.

**Prerequisites

- Device with USB interface and Plugwise Stick pl2303
- Only Plugwise Circle and Circle+ are currently supported



PoE Clock

PoE Clock

The PoE Clock module transmits the sensor values to the PoE Clock. The supplied values or the time are displayed alternately. Subsequent interval times can be set:

1/5/10/15/30 or45 minutes

1x per hour

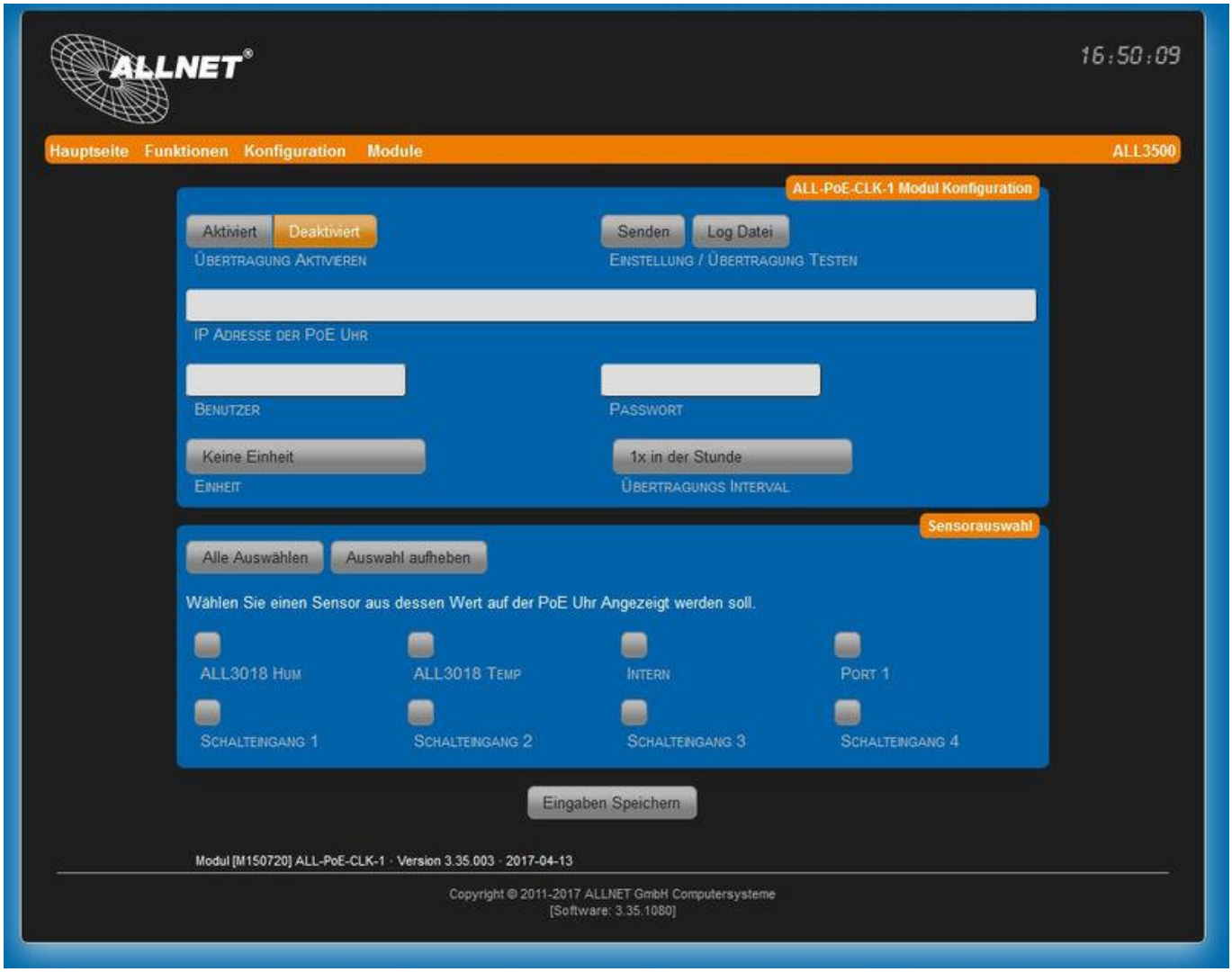
Every 3 hours

Every 6 hours

Every 12 hours

Prerequisite:

ALLNET PoE Clock (Art. 109328)



PoE Counter

PoE Counter

Displays the sensor values supplied on the PoE counter. The values or the count are displayed alternately. You can set the following interval times

1/5/10/15/30 or45 minutes

1x per hour

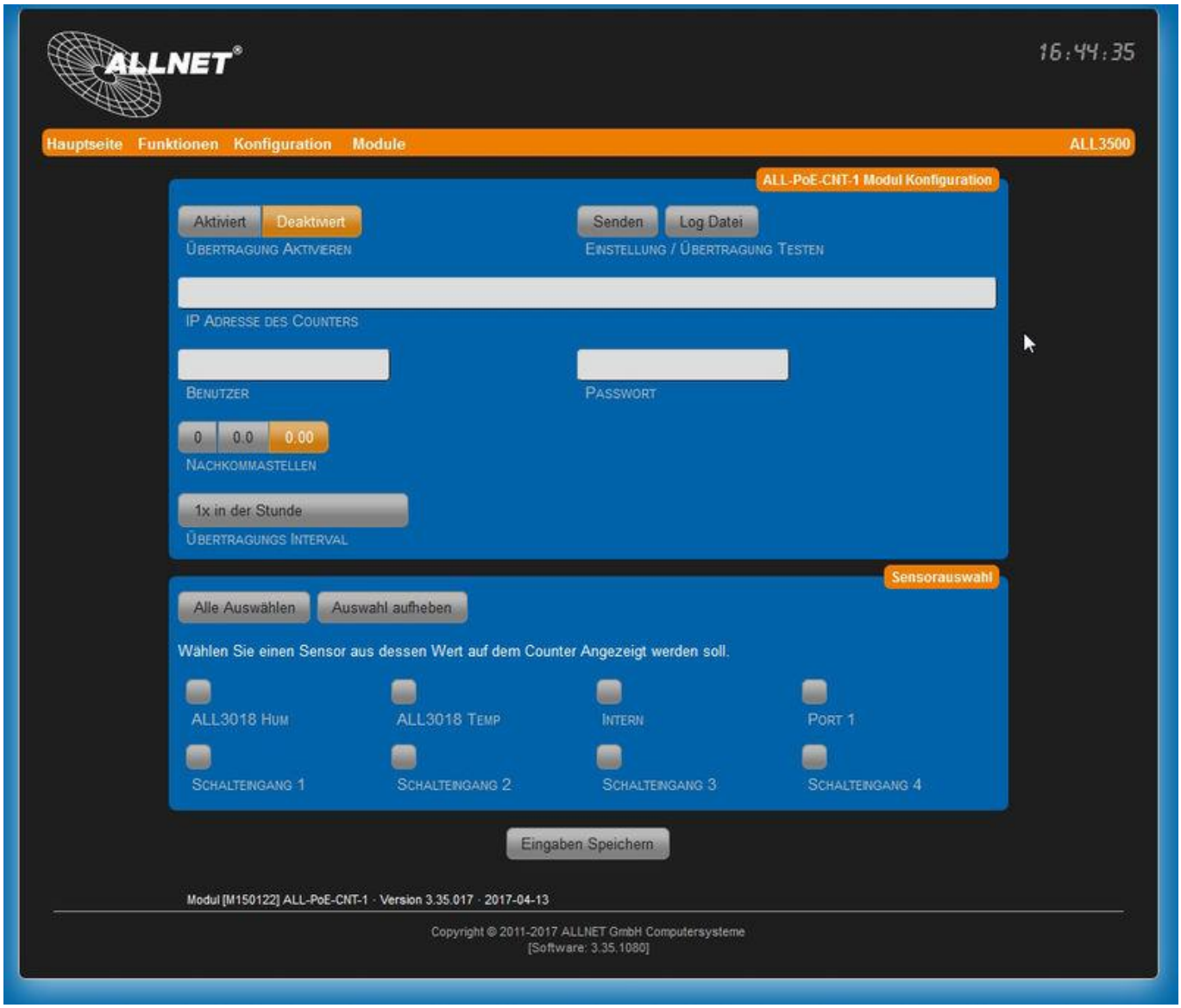
Every 3 hours

Every 6 hours

Every 12 hours

Prerequisite:

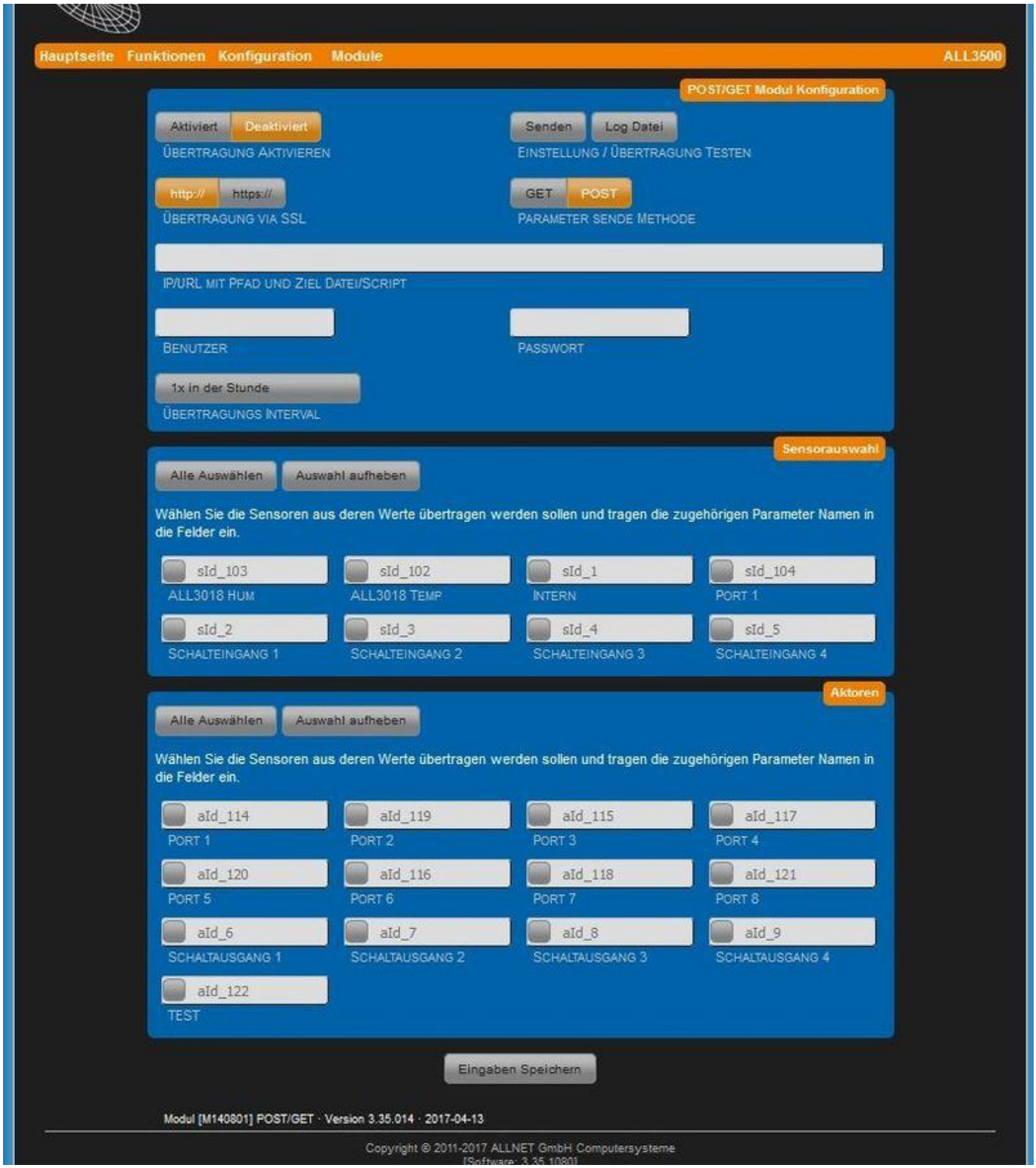
ALLNET PoE Counter (Art. 109327)



POST-GET Push to Server

POST-GET Push to Server

Data transmission via POST/GET to a separate script on external servers.



SNMP

SNMP

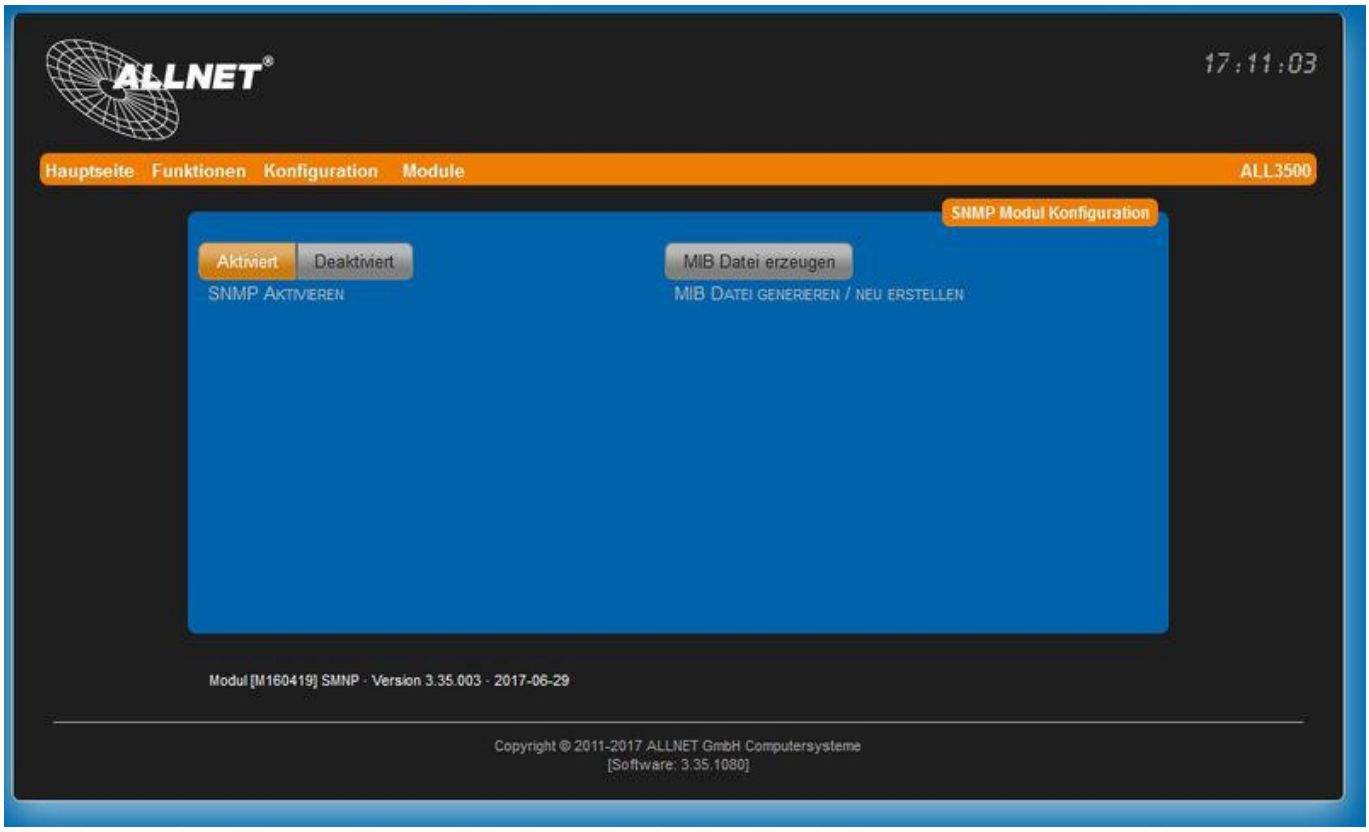
This module ensures that the MSR end devices can be queried via the SNMP protocol. The MIB file required for import into external management systems can be exported with this module.

Please configure all sensors in the control center first and then generate the MIB file and export it to your system.

If you use the Paessler software PRTG https://www.de.paessler.com/prtg or CheckMK, the following instructions are available:

! Paessler PRTG Guide

! Native integration in CheckMK 1.6



Think Speak Cloud

Think Speak Cloud

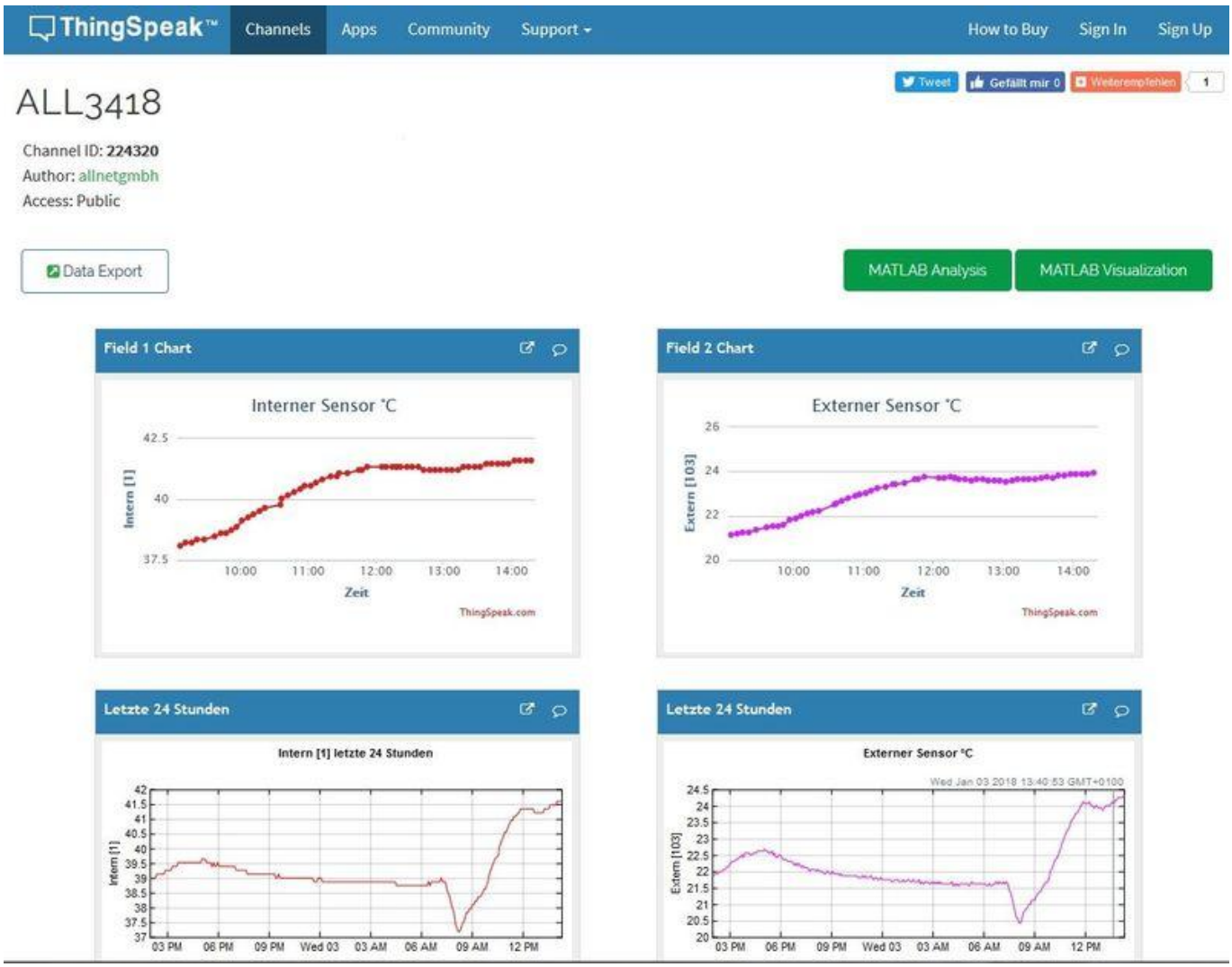
Data transfer to the ThingSpeak Cloud

Prerequisite:

Account with ThingSpeak

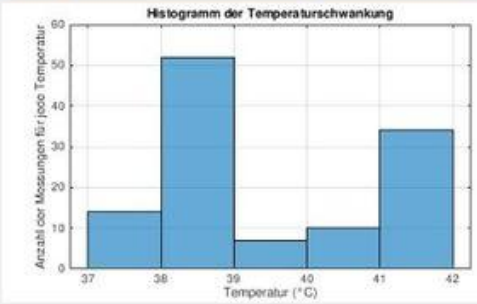
We recommend NOT to use this module with ALL3072 due to lack of memory & performance. Brief description (PDF) Public "channel" of the test device

This module only sends data - currently NO switching is possible

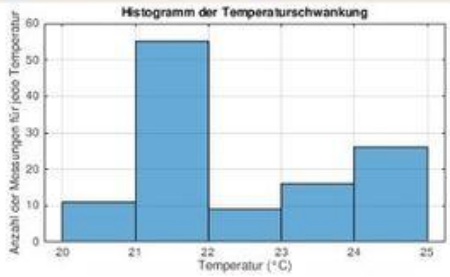


ThingSpeak™ Channels Apps Community Support How to Buy Sign In Sign Up

Anzeige der Temperaturschwankungen in d...



Anzeige der Temperaturschwankungen in d...

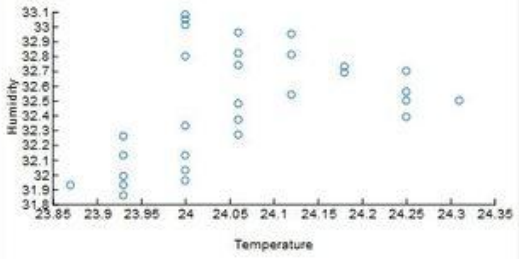


Field 4 Chart

Field 3 Chart

Channel Location

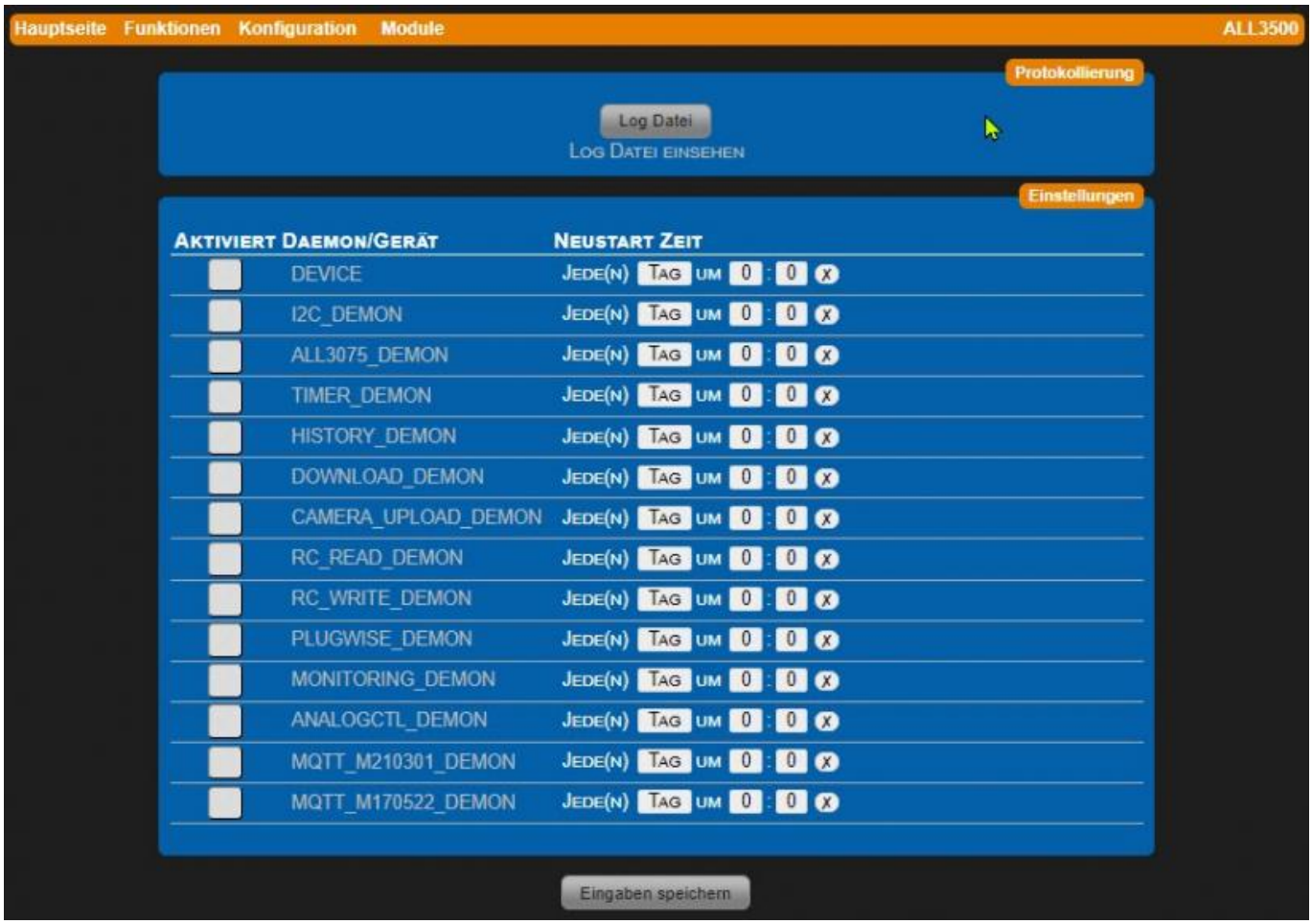
Visualisierung der Beziehung zwischen Te...



ALLNET Automatic Restart

ALLNET Automatic Restart

With this module it is possible to restart various processes automatically.



MyDevices - Cayenne Cloud

MyDevices - Cayenne Cloud

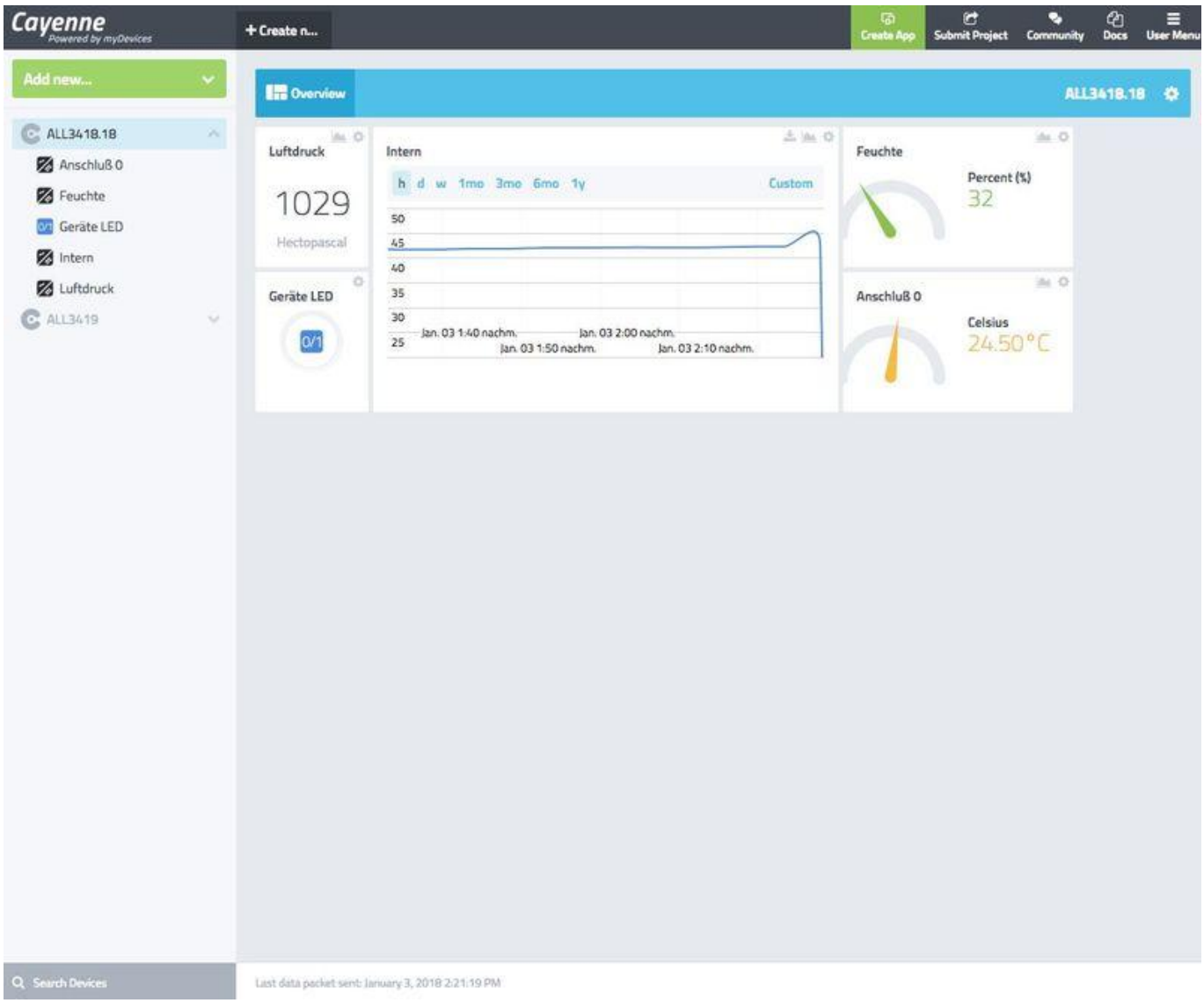
MyDevices (Cayenne Cloud) module

Data transfer to the MyDevices Cloud<

Note

Account with MyDevices We recommend NOT to use this module with ALL3072 due to lack of memory & performance.

Kurzbeschreibung (PDF)



Software SDK-JSON API

Software SDK/JSON = JavaScript Object Notation API

Do you want to integrate our MSR devices into your own software? You can find our software interface here.

! API documentation for remote control/remote readout ! Here you will find the documentation of the possible functions for remote control and remote readout of the data supplied by the connected sensors and actuators. The API contains code examples for communication with the ALLNET components. ! **Download**

! JSON API documentation for ALLNET switches. ! ! DOWNLOAD