



# WIFI Monitor for Water Leakage and Water Usage

SKU: AQXWIE02

Version: 1.1.0



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## 1. Product Description

The Aqua-Scope water leak monitor detects water leaks and records the water consumption, temperature and water pressure. In combination with an Aqua-Scope remotely controlled shut-off valve, the system regularly searches for microleaks and shuts off the water if necessary. The user is then alerted via radio, both during such incidents and when pressure anomalies are detected. An additional wired flood sensor can be connected directly to the device. Furthermore, up to 10 additional wireless sensors can be distributed and connected throughout the building to detect water leakage and report it to the monitor via radio. The device consists of two parts:

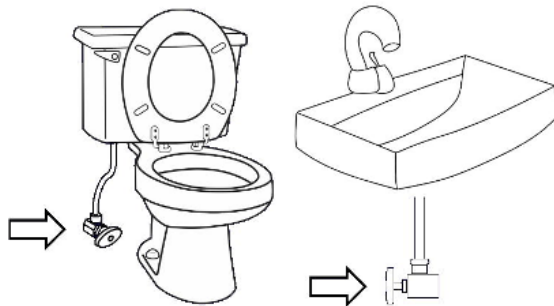
- Main Unit (Monitor): Detects water consumption and leaks by analyzing pressure waves; Records temperature, water consumption, and water pressure continuously; Wireless alerts for detected leaks or when pressure or temperature thresholds are exceeded or not reached; Option to connect an additional wired flood sensor directly to the device.
- External Sensor Head: Connected to the water pipe, installed somewhere in the building at a 1/4-inch inspection opening, or with a provided T-piece under any sink at the angle valve.

Thanks to the excellent sound characteristics of water, a single sensor somewhere in the house is sufficient to detect water consumption and leaks throughout the entire building.

Control of the system is centralized through a mobile phone app using WiFi communication. Furthermore, data can be transmitted to an MQTT server or an HTTP 'webhook,' facilitating integration with modern Smart Home systems.

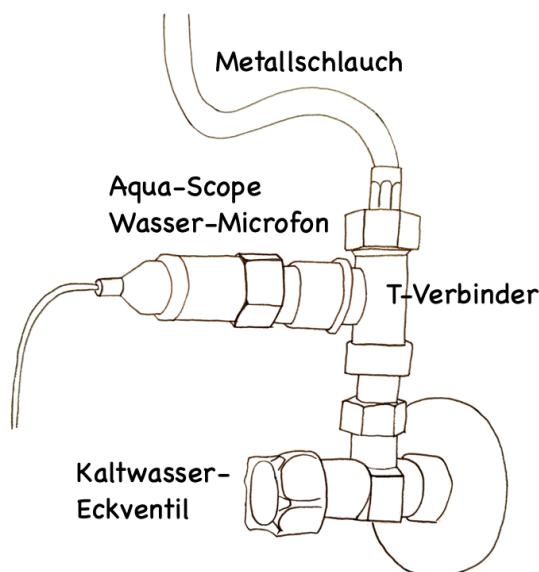
The sensor is powered either by an external power supply with a USB-C power supply or by an optional internal ER26500 battery (Bobbin Cell C). Both the sensor head (IP67) and the main housing (IP65) are waterproof and can be used outdoors or in particularly humid and/or dirty environments.

## 2. Installation



The Aqua-Scope sensor head must be connected to a single point in the house with the piping system. Ideal connection points are angle valves located under sinks or next to toilets. Other options include 1/4-inch access openings on the pressure reducer, shut-off valves, or other installation devices. It is recommended to choose a location as low as possible in the apartment (ideally in the basement or on the first floor).

**Attention!** If a pressure reducing valve (PRV) is installed, the Aqua-Scope monitoring device must be installed between the pressure reducer and the individual outlets. If no PRV is present, the device can be installed anywhere, but the accuracy of the measurements will be lower. Details can be found in the "Effects of Pressure Reducer" section.



1. If two angle valves are present under the sink, please identify the cold water supply. Simply turn on the hot water and check which valve warms up.
2. Close the faucet and shut off the angle valve by turning it clockwise.
3. Remove the metal hose from the angle valve with the provided 19mm wrench. Have a towel ready to catch the water coming out of the end of the hose.
4. Mount the T-shaped connector on top of the angle valve and secure it with the 19mm wrench.
5. Connect the metal hose to the top of the connector and secure it with the 19mm wrench.



6. Screw the Aqua-Scope pressure sensor head into the side opening of the connector and secure it by hand. It is not necessary to tighten it too much.
7. Open the angle valve again by turning the knob counterclockwise.
8. Check all three connections for leaks for a few seconds.
9. Attach the Aqua-Scope to a suitable location with double-sided tape and connect the sensor head to the main device. If necessary, insert the flood sensor into the audio jack.
10. Turn on the device using the USB-C power plug. Please use the included power adapter. This power adapter has a very low harmonic distortion, which is necessary for precise measurements. Alternatively, insert a battery.

## 3. Connecting to wireless network

▲ Nicht sicher 192.168.4.1/#

### WiFi Connection

Select your Wifi-Network

CPAP

WIFI (WPA) Password

Your Account Email

cp@aqua-scope.com

[Advanced Settings](#)

Save

After inserting the two batteries or connecting the external power supply, the LED in the button blinks red/green, indicating the factory state.

You can connect the sensor to a **Wi-Fi network of your choice only in the factory state**. The factory state can be restored by waiting for the first beep sound when inserting the batteries or connecting the power supply, then pressing and holding the button for 4 seconds (counting four red blinks helps). If the LED lights up three short red flashes, please release the button.

In the factory state, when powered by batteries, you have exactly 120 seconds to connect the device to Wi-Fi. After that, the sensor goes into sleep mode to conserve battery life. You can wake up the device in this state by pressing the button, and the LEDs will blink red/green again for 120 seconds, indicating readiness to connect to Wi-Fi. In network operation, the factory state, indicated by red/green blinking, is continuously maintained.

For communication via Wi-Fi, three different methods are available:



1. **Conveniently through the Aqua-Scope App:** Please read the description of app installation and usage in the "Device Usage" section or directly in the app. There is no separate manual for the individual functions of the app.
2. **Through the built-in web server:** In the factory state, the device acts as an open Wi-Fi access point with the SSID 'Scope.' You need to connect your mobile device or PC to this SSID and open the page <http://192.168.4.1> in a web browser. Now, enter the SSID and WPA key of the home Wi-Fi. If you want to control your device later via the Aqua-Scope app, you need to have an Aqua-Scope account and provide this email address so that the device can be associated with your account. Under "Advanced Options," additional settings for the device's communication options can be made (MQTT, JSON, Bluetooth, local web server). In the manual "Aqua-Scope Developers Manual", there is more information on this. The 'Save' button saves and activates the values. If they were correct, the red/green blinking stops. Otherwise, the process must be repeated with the correct SSID and WPA key.
3. **Through Bluetooth:**

**(1) Connect with BLE Device**

Connect

**(2) Provide Wi-Fi Credentials**

SSID of Wi-Fi-Network

WPA Password of Wi-Fi-Network

Aqua-Scope Account Email

**(3) Write Data into Device**

Submit

In the factory state, the Bluetooth interface on the device is active and can be used for initial configuration. This can be done through any Serial Bluetooth application. However, it is more convenient on a PC or an Android mobile phone with Bluetooth capabilities. Open the webpage <https://ble.aqua-scope.com> in the Chrome browser, connect to the Bluetooth device 'AQS-XXXXXX' (XX is the device ID), and enter the SSID and WPA key via the webpage form. More information is also available in the "Aqua-Scope Developers Manual".

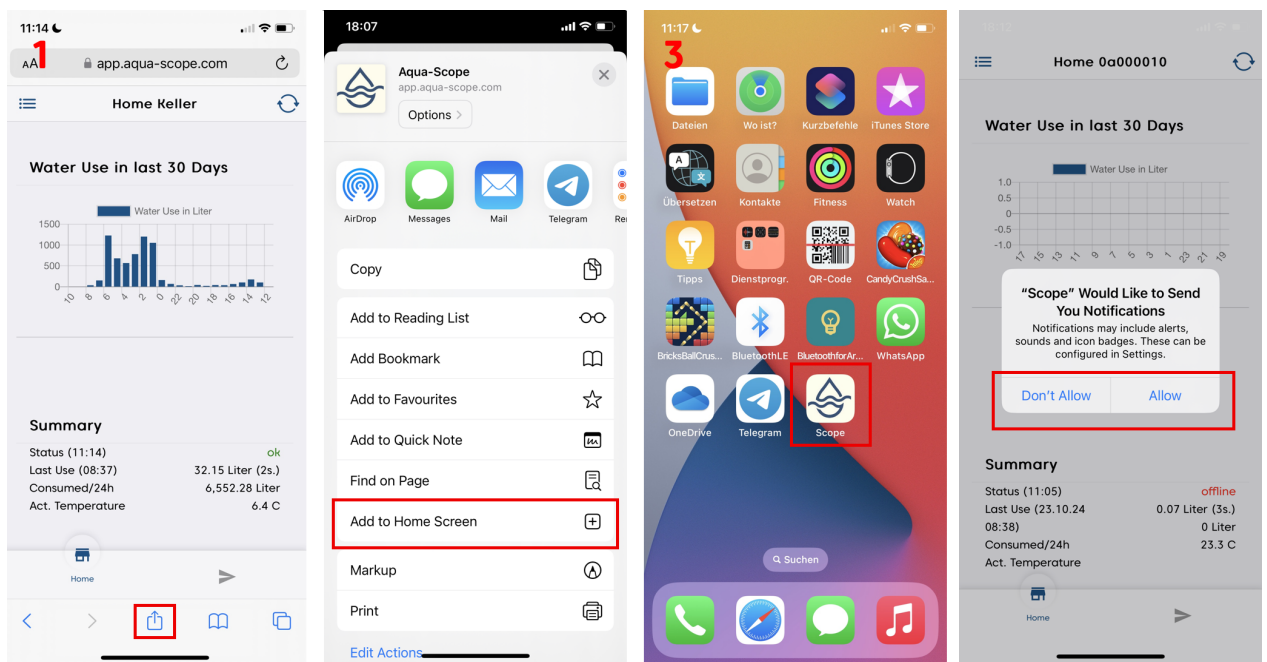
## 4. Wireless Usage

### 4.1. Wireless Access



When the device is connected to the local Wi-Fi, its functions can be used through various communication methods (even parallel):

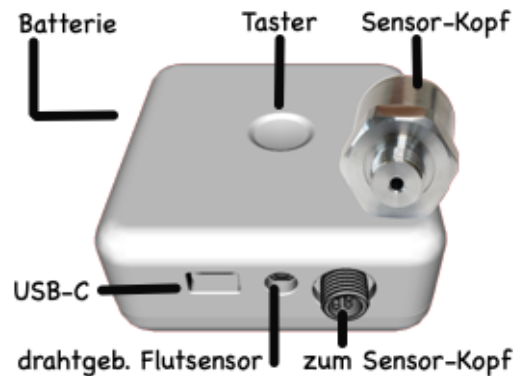
1. **Mobile Phone App:** You may not find the Aqua-Scope app in the app store of your mobile phone. We use what's known as a PWA (Progressive Web App). For more information, see Progressive Web App on Wikipedia. To access it, open the system browser (Chrome on Android or Safari on iOS) and go to <https://app.aqua-scope.com>. This will allow you to use almost all of the app's functions in your regular browser.
  - On Android, you will shortly be prompted to install the app as a native app on your device. Please confirm this prompt, and a native app will be installed on your screen.
  - On iOS, a shortcut to the website must be added to the home screen. To do this, select the icon marked in Image 1 in Safari to open the shortcut dialog. Then select the "Add to Home Screen" option (Image 2). A standard app icon will now appear on your home screen (Image 3). You may need to log out and log back in within the app so that iOS prompts you to allow push notifications (Image 4).



2. **MQTT Server:** If configured accordingly, the sensor's status information will be sent to the specified MQTT server. The MQTT service must be enabled, and your own MQTT server/port/login credentials must be entered into the device. Further details can be found in the Aqua-Scope Developers Manual.
3. **Own Web Service:** Most smart home gateways allow the receipt and display of sensor data through plugins. More information can be found in the Aqua-Scope Developers Manual.



## 4.2. Hardware



The above image shows the device with its connection options. The following connections or interfaces are present on the device:

- USB-C port: This port is only for power supply. The supplied USB-C power adapter is plugged in here. Please use the supplied power adapter from the manufacturer KTEC. Other cheaper power supplies may introduce noise to the device, negatively affecting sensor quality. The USB-C port is waterproof.
- The external sensor head is connected to the main device through a waterproof and screwable connection.
- Another external flood sensor head can be connected via the waterproof 3.5mm audio jack (included). This jack is also waterproof.
- On the back, there is the screwable battery compartment, also protected with a rubber seal against water ingress.
- In the center of the main device is the only button and thus the only local control of the device: It recognizes simple or multiple button press sequences:
  - **Press and hold the button immediately after the first beep** during startup for 5 seconds: The device will be reset to the factory state.
  - **Press once briefly:** A status message is sent to the network. If battery-powered, the device is awakened.
  - **Press twice:** Existing alarms (LED blinking red) will be ended.
  - **Press three times:** Currently not assigned.
- Directly below the button is the multi-color LED:
  - **Yellow glowing or blinking in various colors:** The device is booting.
  - **Red/green blinking:** The device is in the factory state and searching for a wireless connection. In this state, the internal web server and the Bluetooth interface are active.
  - **Slowly breathing blue or green:** The device is connected to the network and external power supply, in the rest or normal state.
  - **Red blinking:** Alarm active, and the device is connected to external





power.

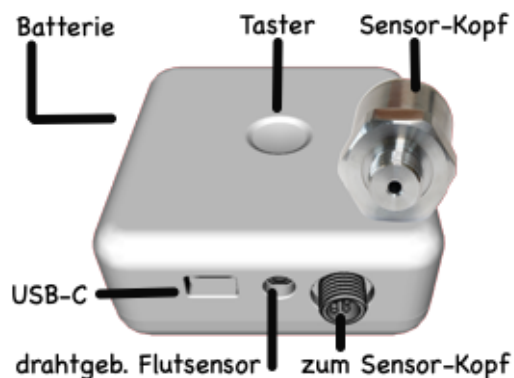
- **No LED:** The device is either not powered or in battery-powered sleep mode.

### 4.3. Access to Sensor Data and Device Control

When the monitor is connected to the local Wi-Fi, its functions can be used through various communication methods (even parallel):

1. **Mobile Phone App:** You won't find the Aqua-Scope app in your phone's app store. We use a Progressive Web App (PWA, more at [wikipedia.org/wiki/Progressive\\_web\\_app](https://en.wikipedia.org/wiki/Progressive_web_app)). To use it, open the website in the system browser (Chrome@Android or Safari@IOS) at **<https://app.aqua-scope.com>**. You can use almost all app functions in the regular browser. Android will offer to install the app on the device after a short time. On IOS, a shortcut of the website must be added to the desktop to receive push notifications if allowed.
2. **MQTT Server:** When configured accordingly, the sensor's status information is sent to the configured MQTT server. The MQTT service must be active, and your own MQTT server/port/login must be set in the device. More information can be found in the Aqua-Scope Developers Manual.
3. **Own Web Service:** Most smart home gateways allow the receipt and display of sensor data through plugins. More information can be found in the Aqua-Scope Developers Manual.

## 5. Device Operation



### 5.1. Remote Access

When the monitor is connected to the local WLAN, its functions can be accessed through various communication channels (even simultaneously):

1. **Mobile Phone App:** The Aqua-Scope App is not found in the app store of your mobile phone. We use a Progressive Web App (PWA), more information





at [wikipedia.org/wiki/Progressive\\_web\\_app](https://wikipedia.org/wiki/Progressive_web_app). Open the website <https://app.aqua-scope.com> in the system browser (Chrome@Android or Safari@IOS). You can use almost all app functions in the regular browser. Android will offer to install the app as a real app on the device after a short time. On IOS, a shortcut of the website must be set on the desktop to receive push notifications if allowed.

2. **MQTT Server:** If configured, the sensor's status information is sent to the configured MQTT server. The MQTT service must be active, and your own MQTT server/port/login must be set in the device. More information can be found in the Aqua-Scope Developers Manual.
3. **Custom Web Service:** Most smart home gateways allow the receipt and display of sensor data through plugins. More information can be found in the Aqua-Scope Developers Manual.

## 5.2. Measurement Values and Alarms

The device **measures the pressure and temperature of the water** in the pipe where the sensor is installed multiple times per second.

Additionally, the sensor analyzes **all acoustic waves occurring in the water**. Since water is an excellent transmitter of acoustic waves, a single sensor is sufficient to capture all acoustic events in the house from a main water meter, pressure reducer, or pressure booster. These three devices block the transmission of sound waves in the water pipe. By analyzing the sound waves, the sensor distinguishes between normal water consumption and various anomalies, each reported as an alarm to the user.

The following alarms are possible:

1. One of the wired or wireless flood sensors has detected water. This is typically triggered by a leak near the respective sensor.
2. The water pressure has risen above the threshold set in the app or through configuration parameter 6. The reason for this alarm could be malfunctions of a pressure reducer or backflow preventer to the hot water system.
3. The water pressure has fallen below the threshold set in the app or through configuration parameter 7. The reason for this could be a pipe break; however, the water may have simply been turned off.
4. The external sensor is not connected to the main device.
5. The external sensor is connected to the main device but not connected to a pressurized water line.
6. The water temperature has either fallen below the value set in the app or configuration parameter 11 or risen above the value in the app or configuration parameter 16.
7. The Pipe-Check has detected a microleak. There is a separate chapter in this manual for 'Pipe-Check'.
8. The duration of water draw has exceeded the value set in the app or



configuration parameter 10. This may indicate a leak or be triggered, for example, by filling a swimming pool.

9. A clogged toilet has been detected.
10. Water is beginning to flow, likely caused by a leak due to specific acoustics.

The alarm is transmitted to the app and forwarded there via push notification and (configurable in the app) as an email or voice message. If the condition that triggered the alarm has been resolved, the alarm will be automatically cleared. It is also possible to clear the alarm by double-clicking on the monitor's button, even if the alarm condition has not been resolved. The alarm will then remain locked until the next power-on.

### **5.3. Sensor Data**

The sensor measures water pressure, water consumption, and water temperature, and sends the values every 15 minutes, along with operating time, battery consumption, and battery voltage, via WLAN.

### **5.4. Calibration**

To correctly evaluate acoustic signals in the water, the sensor must be calibrated. This happens automatically after the device is connected to the radio. The calibration process takes about 24 hours. During this time, water withdrawals may already be displayed, but they may still be roughly incorrect. Incorrect displays will occur, especially if the normal water pressure fluctuates significantly during the calibration period. This can happen if the target pressure of the pressure reducer is changed during this time or if the device is first tried on the table before being connected to the water line for final installation.

In this case, and also otherwise if needed, the calibration can be repeated. The corresponding button in the app can be found in the 'Configuration' menu under 'Thresholds/Calibration'.

### **5.5. Effect of a Pressure Reducer**

An installed pressure reducer (PRV) is common in modern European house water installations. Without a pressure reducer, the Aqua-Scope monitor is still usable, but some functions are restricted:

- No Restriction: Pressure monitor, temperature monitor, flood alarm, frost alarm, overpressure alarm, microleak test (Pipe-Check)
- Less Precise: Consumption alarm, water consumption measurement, clogged toilet

### **5.6. Communication with External Devices**



The Aqua-Scope Monitor can operate as a standalone device, but its full functionality is realized when used in conjunction with other devices: additional flood sensors distributed in various locations and, particularly, a motor for shutting off water when needed.

Aqua-Scope offers compatible retrofit motors for different types of shut-off valves. These motors are installed directly on the shut-off valve without the need to interrupt water supply or cut into the water pipe. These motors can be removed without causing damage. The Aqua-Scope Monitor communicates with the motor through an internal LoRa radio system. LoRa was designed to communicate in challenging conditions such as basements and radio-frequency-difficult areas. Therefore, installing the monitor on an upper floor and a shut-off motor directly at the water meter in the basement is not a problem.

The motor needs to be paired with the monitor through the Aqua-Scope App. In the app's configuration menu, there is an option for "New Sub-Device." Only the QR code/ID on the device needs to be entered, and the motor is ready for operation. The QR code/ID must be 16 characters long and is located on both the device and the packaging.

- The app allows direct control of the motor through the "OPEN" and "CLOSE" buttons that appear.
- Configurable timers in the app enable you to automatically turn the water on or off at specific times on certain days.
- The motor facilitates an automatic Pipe-Check. More details in the "Pipe-Check" section.
- If configured in the app, the motor will automatically shut off in the event of detected leaks or other alarms.
- Of course, you can also control the motor directly at the device using the button.

Up to 9 additional external flood sensors can be paired with the monitor. This allows direct protection of sinks or other critical areas through a flood sensor. Pairing is done through "New Sub-Device" in the app, and the app automatically recognizes the type of device to be paired.

## **5.7. Pipe-Check**

The detection of micro-leaks in the pipe system requires a special measurement method called 'Pipe-Check.' This process takes about 240 seconds, and during this time, the water system must be in a "rest" state, meaning no water withdrawal should occur. The 'Pipe-Check' should ideally take place at night as events like water withdrawal or water heating can disrupt the process without issues.

During the 'Pipe-Check,' water must be shut off. Therefore, it is recommended to



install a retrofit motor that performs this task automatically at night. The time and days of the test can be set in the app as a timer (Configuration -> Timer) with 'Pipe-Check' as the action. If no retrofit motor is connected to the monitor, water can still be manually turned off, and the 'Pipe-Check' can be started manually in the app.

If the Pipe-Check indicates a micro-leak, there is no need to panic. In most cases, it will be a dripping faucet. If the result of a Pipe-Check shows a micro-leak over several days, it's time to investigate the cause. The alarm message provides further hints on where the leak may be located.

## 6. Battery Operation

The sensor can be operated with an external power supply, a battery, or both simultaneously. The status at the moment of powering on defines the device's operating mode. If mains voltage is present at the moment of powering on, the device will remain in power mode until the next status report (default every 15 minutes), even if mains voltage fails and a battery is inserted. The battery then operates as a backup.

If the sensor is started by inserting a battery, it will switch to battery mode. This means that some sensor functions are shut down to save power:

- The status LED remains dark.
- A local alarm is neither indicated acoustically nor by a red LED.
- The device responds only slowly to incoming commands (on average, about 10 seconds in power mode, up to one hour in battery mode).
- The device can no longer receive alarms from external wireless flood sensors.
- The sensor data is sent only hourly instead of every 15 minutes.
- If the device has LoRaWAN communication capability, it will attempt to join the LoRaWAN network only once (JOIN).

An estimate of battery life can be found in the app under "Devices". With a pressure reducer, the battery lasts about 8 to 10 years, without a pressure reducer in the water pipe, the lifespan is about 4 years.

## 7. Device Specific Alarms and Parameters

If you want to use the device within a machine-2-machine environment (MQTT, JSON Web Services) the Aqua-Scope Developers Manual will provide you with all the required information that apply to all Aqua\_Scope devices. Here you find the missing device-specific information complementing the description within the Aqua-Scope Developers Manual.

### 7.1. Configuration Parameters



The device has a set of configuration parameters that can be changed using downstream commands. Details on the format are available in the 'Aqua-Scope Developer Manual'. Beside the general configuration commands mentioned in the developer manual (1,3,11,16,19,27,28,29,30,31) the following device-specific configuration parameters are available:

- Parameter 4: **Valve Motor Action**, This bitmap defines when a paired motor shall shut off the water. Each bit of the bitmap represents an alarm type as defined in the list of the alarm types.
- Parameter 5: **Norm Pressure**, in mBar. This parameter is for information only. It contains the set-pressure of a PRV is a PRV is installed.
- Parameter 6: **Pressure Alarm Upper Threshold**, set in mBar, Default is 8000 mBar
- Parameter 7: **Pressure Alarm Lower Threshold**, set in mBar, Default is 1 mBar
- Parameter 8: **Consumption Translation Parameter**, his parameters is used to convert the measured velocity and duration of flow of the sensor into real liters of consumption. Default is 1000
- Parameter 10: **Long Consumption Alarm Threshold**, set in seconds. This time defined when a long flow alarm will be sent. Default is 900 mBar
- Parameter 13: **Pipe-Check Duration**, set in seconds, Default is 240 seconds
- Parameter 14: **Pipe-Check Abort**, set in mBar, This defines when a PipeCheck is aborted due to warm water preparation. Default is a one-time pressure increase of 200 mBar
- Parameter 15: **Pipe-Check Alarm**, set in mBar, This defines when a PipeCheck will indicate a leak. Default is a drop of 30 mBar after the Pipe-Check ends.
- Parameter 18: **Temperature Sensor Offset** (allows adding a positive or negative linear offset to the temperature sensor value to compensate for misalignments), value in 1/10 degree Celsius, default is 0.

## 7.2. Alarm Types

The following device-specific alarm types are supported by this device (For the general format of alarm message and general alarm types please refer to the 'Aqua-Scope Developer manual'):

- **Type = 1** (mask = 0x001): One of the external water sensors has tripped, indicated water nearby the device.
- **Type = 3** (mask = 0x004): The detected water usage has exceeded the threshold defined in configuration parameter 10. The value contains the flow length in seconds hitting the threshold.
- **Type = 4** (mask = 0x008): The measures water pressure exceeded the lower pressure threshold defined in configuration parameter 7. The value provided with the alarm message contains the actual pressure sensor value.
- **Type = 5** (mask = 0x010): A jamming toilet flap has been detected.



- **Type = 6** (mask = 0x020): The measures water pressure exceeded the higher-pressure threshold defined in configuration parameter 6. The value provided with the alarm message contains the actual pressure sensor value.
- **Type = 7** (mask = 0x040): A dripping faucet as been detected.
- **Type = 8** (mask = 0x080): The 'PipeCheck' found a micro-leak.
- **Type = 10** (mask = 0x200): A very strange water usage pattern has been detected.
- **Type = 14** (mask = 0x2000): The Sensor Head is not connected to main device. The value is not set.
- **Type = 15** (mask = 0x4000): The Sensor Head is connected to the main device but not in contact with water. The value is not set.

## 8. Scope of Delivery

- Water Monitor main device (without battery)
- Pressure sensor head with 80 cm cable
- 3/8 Inch water pipe connector (T-shaped)
- One external flood sensor with cable
- USB-C power cable and power supply
- 19 mm wrench to unfasten and fasten the 3/8 Inch connections of the pipe connector

## 9. Information related to Drinking Water Directive EU 98/83/EC

The t-shaped part of the device is exposed to drinking water and therefore subject to the European Drinking Water Directive. The certified used material is called CW509L, which is in the list of approved of materials of the German Environment Agency (UBA) in the version from May 14th, 2020 under section 2.1.3.1.

## 10. Technical Data

- Power Supply: External USB Power Plug 5 V/ 1A
- Battery: Bobbin Cell C ER26500, Lithium-Thionyl Chloride
- Processor: ESP32-WROOM\_32E (Xtensa Dual Core 32 Bit, 240 MHz, 520 KB RAM)
- Wireless Connection:
  - WLAN IEEE 802.11b/g/n (2.4 GHz WIFI)
    - Aqua-Scope Cloud Protokoll
    - MQTT Client
    - JSON Webservice Client
  - Bluetooth 5 (LE)
    - UART Profile
- Pressure Sensor Head:



- Range : 0 ... 1000 kPa (10 bar)
- Overload: 150 Percent of maximum pressure
- Connection: G 1/4 " female
- Communication: I2C
- Precision: < 1 Percent dynamically
- Built-in High-Precision Temperature Sensor
- Dimensions (Main): 91 mm x 91 mm x 30 mm
- Weight (Main Device): 105 gr
- Weight (Sensor Head): 140 gr
- Protection: Main Device: IP 65, Sensor Head: IP 67
- User Interface: 4 colored LED, single touchless button
- Environmental Conditions:
  - Shipment and Storage: -65 °C ... 125 °C
  - Operation: - 20 °C ... 50 °C
  - Rel. Humidity: 0...90 %
- Minimal Flow Speed:
  - With Pressure Reduction Valve: < 250 ml /m
  - Without Pressure Reduction Valve : < 2000 ml / m
- Pipe-Check-Sensitivity: < 4ml/h

## 11. Support and Contact

Should you encounter any problem, please give us the opportunity to address it before returning this product. Please check our website [www.aqua-scope.com](http://www.aqua-scope.com) and particularly the support section for answers and help. You can also send a message to [info@aqua-scope.com](mailto:info@aqua-scope.com).

While the information in this manual has been compiled with great care, it may not be deemed an assurance of product characteristics. Aqua-Scope shall be liable only to the degree specified in the terms of sale and delivery. The reproduction and distribution of the documentation and software supplied with this product and the use of its contents is subject to written authorization from Aqua-Scope. We reserve the right to make any alterations that arise as the result of technical development.

- Phone: +372 (0) 6248002
- eMail: [info@aqua-scope.com](mailto:info@aqua-scope.com)
- Web: [www.aqua-scope.com](http://www.aqua-scope.com)

## 12. Declaration of Conformity



Aqua-Scope Technology OÜ, Sakala 7-2, 10141 Tallinn, Republic of





Estonia, declares that this radio emitting device works on the following frequencies:

**Български** С настоящото Aqua-Scope Technology OÜ декларира, че този тип радиосъоръжение AQXWIE02 е в съответствие с Директива 2014/53/ЕС. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce).

**Čeština** Tímto Aqua-Scope Technology OÜ prohlašuje, že typ rádiového zařízení AQXWIE02 je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce).

**Dansk** Hermed erklærer Aqua-Scope Technology OÜ, at radioudstyrstypen AQXWIE02 er i overensstemmelse med direktiv 2014/53/EU. EUoverensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce).

**Deutsch** Hiermit erklärt Aqua-Scope Technology OÜ, dass der Funkanlagentyp AQXWIE02 der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce).

**Eesti** Käesolevaga deklareerib Aqua-Scope Technology OÜ, et kesolev raadioseadme tüüp AQXWIE02 vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni terviklik tekst on kättesaadav järgmisel internetiaadressil: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**English** Hereby, Aqua-Scope Technology OÜ declares that the radio equipment type AQXWIE02 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Español** Por la presente, Aqua-Scope Technology OÜ declara que el tipo de equipo radioeléctrico AQXWIE02 es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Ελληνικά** Με την παρούσα ο/η Aqua-Scope Technology OÜ, δηλώνει ότι ο ραδιοεξοπλισμός AQXWIE02 πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Français** Le soussigné, Aqua-Scope Technology OÜ, déclare que l'équipement radioélectrique du type AQXWIE02 est conforme la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible l'adresse internet suivante: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Hrvatski** Aqua-Scope Technology OÜ ovime izjavljuje da je radijska oprema tipa AQXWIE02 u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Italiano** Il fabbricante, Aqua-Scope Technology OÜ, dichiara che il tipo di apparecchiatura radio AQXWIE02 conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE disponibile al seguente indirizzo Internet: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Latviešu** Ar šo Aqua-Scope Technology OÜ deklarē, ka radioiekārta AQXWIE02 atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce) Lietuvių Aš, Aqua-Scope Technology OÜ, patvirtinu, kad radijo įrenginių tipas AQXWIE02 atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo internet adresu: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Magyar** Aqua-Scope Technology OÜ igazolja, hogy a AQXWIE02 típus rádiberendezés megfelel a 2014/53/EU irányelvnek. Az EUMegfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)



**Malti** B'dan, Aqua-Scope Technology OÜ, niddikjara li dan it-tip ta' tagħmir tar-radju AQXWIE02 huwa konformi madDirettiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformit tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li ġej: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Nederlands** Hierbij verklaar ik, Aqua-Scope Technology OÜ, dat het type radioapparatuur AQXWIE02 conform is met Richtlijn 2014/53/EU. De volledige tekst van de EUconformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Polski** Aqua-Scope Technology OÜ niniejszym oświadcza, że typ urządzenia radiowego AQXWIE02 jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności I UE jest dostępny pod następującym adresem internetowym: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Português** O(a) abaixo assinado(a) Aqua-Scope Technology OÜ declara que o presente tipo de equipamento de rádio AQXWIE02 está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Română** Prin prezenta Aqua-Scope Technology OÜ declară că tipul de echipamente AQXWIE02 este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Slovensko** Aqua-Scope Technology OÜ potrjuje, da je tip radijske opreme AQXWIE02 skladen z irektivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Slovensky** Aqua-Scope Technology OÜ týmto vyhlasuje, že rádiové zariadenie typu AQXWIE02 je v slade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Soumi** Aqua-Scope Technology OÜ vakuuttaa, että radiolaitetyypin AQXWIE02 on direktiivin 2014/53/EU mukainen. EUvaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

**Svenska** Härmed försäkrar Aqua-Scope Technology OÜ att denna typ av radioutrustning AQXWIE02 verensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EUförsäkringen om verensstämmelse finns på följande webbadress: [www.aqua-scope.com/ce](http://www.aqua-scope.com/ce)

## 13. Disposal Guidelines



Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging health and well-being.