



## AquaConnect' : Autonomous wireless real-time communication solution for Digisens Ponsel digital sensors

### *AquaMod' integration:*

In the case of an integration approach for the Aqua Mod Module, please visit the website to download the documents related to the LoRaWAN exchange frames and the LoRaWAN radio frequency plans.

### *Aquaconnect' set up:*

- Mount the AquaGat' gateway antenna on its connector at the rear.
- Connect the AquaGat' gateway to the power supply and internet via the network cable and wait for all lights to illuminate.
- Connect and close the AquaMod' battery, ensuring the lid is tight to the stop.



- The installation is operational, the first data is sent after 15s and the AquaMod' activates the wifi for 10min (no data sent and possible access to the local web interface). After this delay, the module sends data every 15 minutes.

**Recording on the Cloud**

- Create an account on the IoT in a box platform at the following link:  
<https://iotinabox.mydevices.com/home/signup>
- Once your account is created, add a company and a location,
- Then, add your Aquamod' to this location:
  - Add Device (Menu>> Add Device)
  - Enter the Deveui entered under the QR code of the Aquamod'
  - Enter the name of this AquaMod
  - Select the temperature unit (can be changed afterward)
  - Confirm
- Then add your AquaGat':
  - Add Gateway (Menu>> Add Gateway)
  - Enter the Deveui starting with "eui-" which can be found at the rear of the device
  - Enter the address of the installation
  - Enter the name of this AquaGat'
  - Confirm
- Wait for the next LoRaWAN communication of your AquaMod.

**Cloud presentation**

The screenshot shows the AquaConnect' web interface. At the top, there's a header with 'Aqualabo' and a 'Menu' dropdown. Below that, the 'Compte client' section shows a company 'A « Company »' and a location 'A « Location »' at '115 Rue Michel Marion, Caudan, 56850, France'. Under the location, there are two 'Waste / Sewage Plant' devices. The first device shows data: Temperature: 15.4°C, WiFi Status: Off, System: OK, Acquisition Period (Min.): 15.0min(s), Memory: 65%, Conductivity: 0.0µS/cm, Salinity: 0.0g/kg, and a timestamp of 12/03/2020 06:20:38 PM UTC+1. The second device shows: Temperature: 16.2°C, WiFi Status: Off, System: OK, Acquisition Period (Min.): 15.0min(s), Memory: 65%, Conductivity: 0.0µS/cm, Salinity: 0.0g/kg, and a timestamp of 12/03/2020 06:18:45 PM UTC+1. Below this is the 'Sales team' section, showing a company 'Sales team' and a location '115 Rue Michel Marion, Caudan, Bretagne 56850, France'. Under the location, there are two devices: 'Outlet' (GRP) with Temperature: 15.7°C, Acquisition Period (Min.): 15.0min(s), Memory: 67%, Redox: 243 mV, and timestamp 12/03/2020 06:17:17 PM UTC+1; and 'Pool 1' (PHEHT) with Temperature: 59.9°F, WiFi Status: Off, System: OK, Acquisition Period (Min.): 15.0min(s), Memory: 66%, pH: 4.5pH, Redox: 391 mV, and timestamp 12/03/2020 06:17:17 PM UTC+1. On the right side, there is a 'Menu' dropdown with items: Alerts, Sensor Map, Reports, Integrations, Add Gateway, Add Device, and Add Contact. A legend box at the bottom left explains: 'In black: Aquamod Name, could be changed in its settings tab' and 'In grey: The sensor type'. A numbered list (1-7) points to specific menu items: 1. Alerts, 2. Sensor Map, 3. Reports, 4. Integrations, 5. Add Gateway, 6. Add Device, 7. Add Contact.

1. Access to the alerts settings of this location
2. Access to the "Ma" interface of this company
3. Access to the report of this company
4. Access to the integration tab of this company
5. To add a gateway to this location
6. To add a device to this location
7. To add a new contact who will be available to read/read-write the location of this company

**Access to the local configuration web interface**

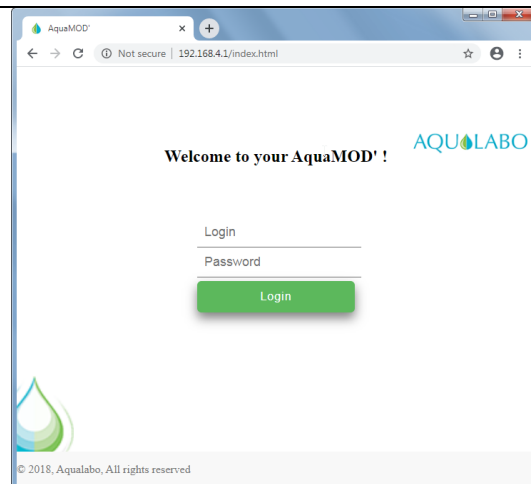
- Wifi is activated automatically for 10 minutes after the first data is switched on and sent.
- To activate the Wifi access point outside the power up, pass the supplied magnet against the body on one side of the case (at the notches):





- Check that the lid of the AquaMOD' is screwed on as far as it can go.
- Place the magnet against the body as shown in the picture and slide it slowly between the two notches. There are sensors on either side of the AquaMod.
- The access point will be created after 10 to 20 seconds and appears in the list of available WiFi networks with the following name: AQUAMOD\_XXXXXXXXXX (where XXXXXXXXXXXX is the serial number shown under the QR code).
- If the AquaMOD' takes a measurement when the magnet is running by, the WiFi access point may not appear. If the WiFi access point is not available after 30s, repeat the activation using the magnet.

- In a web browser (Chrome or Chromium) go to the address <http://92.168.4.1/index.html>

After complete loading of welcome page (text and logo), enter the user name and password and click "Login"



**AQUACONNECT'**

<ul style="list-style-type: none"> <li>- Default user name: <b>Aqualabo</b></li> <li>- Default password: <b>password</b></li> </ul>	
<p>When data entered are valid, the message "Login OK please wait, home page loading" is displayed.</p>	

**Local Web Interface Presentation**

Navigation bar to access:

- Home: main screen
- Settings: Aquamod Configuration
- Calibration: Digisens sensor calibration
- Download: Data and log recovery/deletion

The screenshot shows the AquaMOD' web interface. At the top is a navigation bar with the following items: AquaMOD', wifi time remaining : 00:08:43, Home, Settings, Calibration, Download, and Log-off. A red arrow points to the 'Calibration' tab. Below the navigation bar is a 'System overview:' section containing a table with the following data:

Functions	Status	Details
Sensor	OK	Slave code : 10
LoRaWan	OK	Connected to LoRaWan
Battery	OK	Battery level : 100 %
System	OK	System Ok
Memory	OK	Free space memory : 76 %
Wifi	Not applicable	Automatic turn off time : 9 minutes

At the bottom of the page, there is a logo of a water drop and the copyright notice: © 2018, Aqualabo, All rights reserved.

**After start-up**

- It is advisable to connect to the web interface to check that the whole system is working correctly (OK on all lines of the main screen).
- It is advisable to synchronize the clock of the AquaMod' with that of the computer to allow a backup of the data on the actual date. To do this, go to the "Settings" tab then to the "System" section that appears by default, click "Sync Time" then "Apply" in the confirmation window.

**Your AquaConnect solution is in service!**