



## Specsheet of the aqa.floater version 1.0, 29 June 2022



### Floater characteristics

- Dimensions: length x width X height = 21 X 21 X 25 cm.
- Metal pins: Titanium, diameter = 6 mm, pin length = 3 cm.
- Operating conditions: -0 to +50 degrees Celsius at 0 - 100% relative humidity. Please take the floater out of the water in case of ice formation. It may damage the floater.
- Classification: IP68 for outdoor use.
- Mounting: Put the floater in the water and it will automatically start measuring water quality. Please make sure that the sensor cannot float away or get damaged by colliding with hard objects in its neighborhood.

### Connectivity

- Power supply: 90 - 265 Volt, 50/60 Hz input, 12 Volt DC output, 5 Watt through included power supply, the power supply is delivered with an IP68 connector fitting to the sensor connector. The cable length of the power supply is 8 meters.
- Solar panel connectivity: the floater can be connected to the aqa.solar panel. For this purpose, the same IP68 floater sensor connector can be used.
- The floater is equipped with a SIM card that is pre-loaded by Aqa.earth, plug & play and delivered with a one year license for receiving AQA rewards when data are uploaded to the Aqa.earth servers.
- Sensor data can be monitored through an Android app, an iOS app, laptop or Desktop computer.
- After one year, the sensor owner may optionally extend the license. In case the license is extended, the AQA data rewards will continue. In case the license is stopped, the sensor owner will still be able to upload data to the Aqa.earth webservers and to view the sensor data through our apps. In the latter case, Aqa.earth will update the data bundle on the SIM card at their own cost and receive the mining rewards collected by the sensor.

### Floater sensors

- Conductivity of the water measured at 1 kHz AC.
- Water temperature in degrees Celsius.



- Transmission of light at 461 nm, 520 nm, 641 nm measured with 2 foto diodes with sensitivities ranging from 300 nm to 1100 nm and 500 nm tot 1100 nm respectively.
- GPS

As the network grows, we will be able to translate the floater data through sensor data fusion to water quality. The results presented by our apps will develop over time.

### **CE compliance**

The floater is CE compliant with the following relevant EU directives:

- EU RoHS 2 directive 2011/65/EU
- Delegated directive 2015/863
- EU Low-voltage directive 2014/35/EU
- EMC directive 2014/30/EU