

FAQs

Below is a list of frequently asked questions and their answers.

Do you have another question? Feel free to ask in the comments below!

Question	Answer
What is the accuracy of the Aquality App?	The accuracy depends on the accuracy of the test strips. Test strips for nitrate give an indicative measurement. In our tests, we've found an accuracy of ~30%, while conventional laboratory measurements have an accuracy around 10%. See also the Accuracy page.
What does it cost?	~1 EUR per measurement. Check the getting started page for an order form.
What do I need for a nitrate concentration measurement?	For a nitrate concentration measurement you need Hach Nitrate test strips, an Aquality App reference card, and a smartphone with the Aquality App installed. Check the getting started page.
Why do you recommend to fingerflick of excess water and measure after 60s (instead of after 30s without removing excess water according to the instructions on the package)?	Testing with lab comparisons revealed that scanning after 60s gives better results (after 30s gives underestimates the concentration) and flicking of excess water gives more stable results (lower variance in duplo measurements).
Can the Aquality App be used in brackish or salt water?	Yes, but not in hypersaline water (saltier than sea water).
Can the Aquality App be used in turbid water?	The turbidity of the water may have impact on the color of the teststrip and the result. Check the result carefully. You can also filter the water to get a clear sample, or use a piece of toilet paper to extract a clear sample (see the soil Nmin protocol).
How do the light intensity and camera quality affect the measurements?	This impact is minimized by combining the test strip and the legend on the reference card on the same scan in the same light conditions. Make sure that the scan is not under- or overexposed and that the color differences of the legend are visible. Shadow transitions on the reference card can influence the result and should be avoided. We advise to block direct sunlight (measure in your own shadow). Some smartphone camera's have problems with focusing on nearby objects and therefore with recognizing the markers on the corners.
Why doesn't the Aquality App recognize my reference card?	This can have different causes; most important are the markers on the corners of the reference card. Are they still intact and clean? Also, some smartphones have problems with focusing on nearby objects; try different distances and angles.
My surface water looks very eutrophic with a lot of algae, yet the nitrate concentrations are zero. How is this possible?	Especially in stagnant surface waters, algae can consume nitrate or low oxygen levels can induce denitrification.
Does the Aquality App also work with other brands of test strips?	No, other test strips have different legend colors.
Can I also measure other water quality parameters with the Aquality App?	We enabled measuring salinity (EC) by using the Aquality App to scan the result from a Hanna Dist4 EC meter, see the Aquality App for EC measurements page. More options will follow.
Can I also measure nitrate content in soils?	A do-it-yourself protocol for soil Nmin measurements is described at the Aquality App for Soil Nmin measurements page.
What is your business model?	Like all Deltares software, the app is free ('dare to share'). We're mainly interested in finding new projects to work on the next developments for the app, which will then become available for the entire user community. Organizations with specific requests (e.g. other parameters, an own private web viewer) are encouraged to contact us.
Can I also measure ammonium and phosphate?	Working on that; we now recommend using Hanna checkers for this, See: AmmoniumCheckers-HI700-HI715-HI733-EN.pdf (english version) AmmoniumCheckers-hi700-hi715-hi733-hi784-nl.pdf (dutch version)