PURE WATER CARD

This SMARD CARD will also change YOUR AWARENESS OF DRINKING WATER in the long term.

Unique on the global market – patented and the smart, mobile solution for the worldwide, location-independent use!

Together with the company **Silicon Craft Technology Public Company Limited** from Thailand, we, **VERIDAT Eurotech GmbH**, are pleased to present this WORLD PREMIERE to you today.

This smart card has the standard dimensions of a standard EC / credit card, is battery-free and works according to the world-famous and recognized TDS (Total Dissolved Solid) measurement method

• TDS stands for the total concentration of dissolved solids in water, which usually comes from inorganic salts, minerals, metals and organic substances.

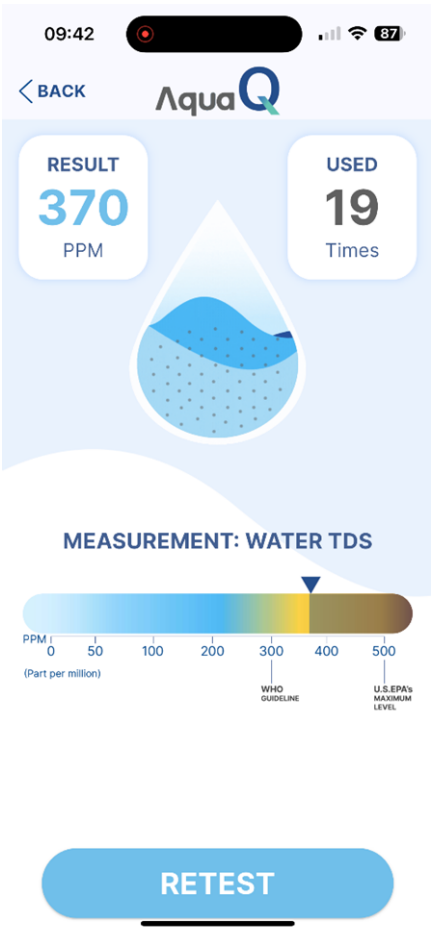
Salts:	K+ Mg2+ Na+ Cl- Ca2+ CO_3^{2-} ···
Minerals:	NO_3^- Zn2+ PO_4^{3-} SO_4^{2-} HCO_3^- ···
Metals:	Fe^{2+}/Fe^{3+} Heavy metals ···

• The TDS amount can be quickly determined by the conductivity measurement of the PURE WATER CARD.

• The amount of TDS can affect the taste of the water. Some components of TDS affect the corrosion of the water system. A high TDS value leads to excessive calcification and shortens the service life of water pipes and household appliances.

TDS in parts per million (PPM)

0-50	Ideal drinking water from reverse osmosis, deionization, microfiltration, etc.
50 – 170	activated carbon filters, mountain springs or Groundwater
170	Hard water
200 – 300	acceptable
200 – 420	Average tap water
300 – 500	High TDS content - water from mineral springs
500 +	Maximum contamination level of the U.S. EPA



The chart values represent the national US average.

Actual TDS values for different regions within the U.S. and other countries may vary.

Please refer to the U.S. EPA's list of national regulations for secondary drinking water. http://www.epa.gov

Your drinking water always in view for a healthier life and carefree travel

Recommendation / Notes

- Should not be used more than 200 times to ensure a reproducible measurement result. However, the PURE WATER CARD can also be used 200-500 times without limitation by the APP!
- The water should completely cover the circular area of the sensor with the water
- Keep the circular area of the sensor clean and do not scratch the surface of the sensor

We provide this card also with your Logo or Brand.

The PURE WATER CARD is a passive NFC sensor for measuring the electrical conductivity of liquids. Based on this measurement, a TDS value is calculated and provided digitally via an AquaMetr APP.

The energy supply is contactless via the NFC field of a smartphone. This makes the card completely battery-free, maintenance-free and suitable for long-term use.

The measurement principle is based on the determination of conductivity, which correlates with the concentration of dissolved ions in the water. The conversion is done in ppm (parts per million = TDS value).

The measurement is a benchmark and does not replace chemical or microbiological analysis. Individual pollutants cannot be specifically determined. Likewise, neither viruses nor bacteria can be detected, determined or measured.

The PURE WATER CARD is not a classic laboratory analysis, but an immediately available, mobile indication solution for the evaluation and comparison of water.

Water TDS Policy & Impacts

TDS does not pose a direct threat to human health. Nevertheless, they have an indirect significance for water quality.

Taste – A high TDS can negatively affect the taste and smell of drinking water.

Corrosion – High levels of chloride, calcium, and metal can cause corrosion in water distribution lines, resulting in higher maintenance costs and lower efficiency.

Health risk – High concentrations can indicate possible contamination by harmful substances such as heavy metals and organic pollutants, which can pose health risks if consumed.

The measurement is a benchmark and does not replace chemical or microbiological analysis to detect viruses, bacteria or individual elements.