



Renowned healing waters around the world share a few common properties: they are higher in hydrogen molecules (H₂) and pH plus are negatively ionized. An ionizer from AlkaViva recreates these properties using water from your tap to create the healthiest water you can drink.

Molecular Hydrogen (Diatomic Hydrogen)

With all the buzz about molecular hydrogen, we are starting to see undocumented performance claims. There are a few important points to understand about hydrogen water ionizer performance in ANY electric ionizer.

The first point about H₂ testing cannot be emphasized enough. Water ionizer performance levels are significantly impacted by source water - whether you are talking about H₂ or pH and ORP. Any alkaline water ionizer machine using hard water with elevated levels of TDS minerals, will always produce its best level of performance. Conversely, the exact same ionizer on soft water will always produce less performance. It is also important to note water quality changes throughout the year in most locations, which can cause different test results. Any water ionizer performance comparison is invalid unless the exact same source water is used.

The second important point is that an alkaline water ionizer machine's flow rate will affect performance. All things being equal, slower flow rate will produce more water ionizer performance. Slowing the flow will also typically raise pH, which is an issue we will cover below. Our Vesta H₂ and Athena H₂ alkaline water ionizer machines offer the convenience of an excellent flow rate and on-board flow control valves and a real-time flow meter display which help you achieve the perfect balance between the flow rate and performance you want.

The third thing to consider is ongoing water ionizer performance after an ionizer has been in service. This is an overlooked point. To achieve optimal water ionizer performance the electrodes must be kept clean. Therefore, how well an ionizer's cleaning system performs its function is critical. You can achieve one set of performance results with a new alkaline water ionizer machine. If you have hard water after your water ionizer has formed scale on the electrodes, you will return lower performance results. Another overlooked issue in ongoing water ionizer performance - especially with H₂ - is the power supplied to the plates. The higher the power used, the quicker the degradation of the platinum plating. Degraded plating will deliver less performance. Many ionizers tout higher power as the solution to water ionizer performance. In the long run, it isn't. Our new H₂ ionizers overcome both issues. First, they include our newly improved DARC cleaning which

already had a 9-year track record as the best cleaning system in the industry. Our solution to the power issue is employing advanced electrode design and manufacturing and then applying the right amount of power. You get efficiency and performance. Our H₂ ionizers run 150 watts of peak power ensuring long plate life.

Lastly, while we understand the basic science of how H₂ is produced during electrolysis, it is a new focus in our industry. No one fully understands all the unique nuances of this delicate chemical process. We don't know if certain properties, in addition to hardness and TDS, affect H₂ performance. Apart from TDS and hardness it is entirely possible that certain water chemistries lend to better water ionizer performance, and others cause less.

That is a lot of information about water ionizer performance. However, we feel these all are important points for properly informed dealers and customers to consider before simply reading—and believing – a company's declaration that “our ionizer does Xppm of H₂”.

Our new H₂ Series Ionizers alkaline water ionizer machines also offer our new and improved version of DARC cleaning plus advanced electrode design and manufacturing, matched to just the right power – below 150 watts.

So, to get optimal benefit from H₂, choose AlkaViva's DARC cleaning and our Smart Design electrodes perfectly powered for maximum efficiency and performance that lasts. Exactly what you want.

Great News for AlkaViva Ionizer Customers:

We have tested (using Reno city water as our source) ionized alkaline water from our top two alkaline water ionizer machines. Both consistently on demand produced H₂ concentrations of around .6 ppm at a 9.5 pH. Higher levels can be also achieved by slowing down the water flow etc. This is higher than test results we obtained from any other water ionizer.

What this means, in simple terms, is that AlkaViva ionizers are able to get consistently good levels of H₂ on all alkaline settings.

ORP

Ionization also alters the water's electrical properties. The way this is measured is through Oxidation Reduction Potential or ORP (redox), which is expressed in millivolts.

Alteration to the ORP in ionized alkaline water also indicates an increase in -OH ions that improve alkalinity plus an increase in bio-available H₂ molecules - responsible for improving hydrating and antioxidant effects.

Ionizer performance is affected by multiple factors, and only the characteristics that can be measured scientifically should be considered when evaluating a water ionizer.

AlkaViva is the **only ionizer company** which has commissioned an EPA-certified, third party, independent laboratory to document the performance of different brands.

pH

pH is a measurement that indicates the level of alkalinity or acidity as measured on the pH scale. More and more researchers and health practitioners understand the importance of balancing body pH to maintain good health.

Ionization raises or lowers the pH in water and drinking ionized alkaline water made with high quality machines can help you maintain this ever-important balance.

