



Athena H₂ FAQ's

How does the performance of the Athena H₂ compare to the old Athena?

The Athena H₂ is approximately 40% stronger than the old Athena. To put that in perspective, with our Reno tap water, which is typically fairly low in TDS, the old Athena would produce -250 ORP on the highest setting and at full flow. On the same water and settings, the Athena H₂ produces greater than -500 ORP. The old Athena produced .3 to .5 ppm of hydrogen at the highest setting on full flow. With the same settings the Athena H₂ produces .5 - .6 ppm of hydrogen. Of course, we can increase hydrogen production (just like ORP production) by slowing the flow. We have seen it produce .9 ppm at a flow rate of 1 liter in 45 seconds. It is important to note that the Athena H₂ produces these results while maintaining a lower pH. Other ionizers must hit very high pH (generally over 10 pH) to maximize -ORP and H₂. We think the lower pH approach is safer health-wise and certainly makes the water better tasting. Because we use less power, we safeguard against plate deterioration, so performance is sustainable over time. Those are very important selling points.

How many plates or electrodes does the Athena H₂ have?

Unlike the original Athena which was a five plate model, the Athena H₂ water cell was re-engineered to include 7, more powerful *SmartDesign* plates. The resulting performance upgrades, as previously mentioned, are better acidic, better -ORP, better H₂ production all with a 20% faster flow rate.

What is *SmartDesign*?

SmartDesign electrodes use state of the art engineering and manufacturing to be super-efficient at lower power. We have found the higher the power density used in ionization, the less H₂ stays in the water. To get the benefit of H₂ it has to dissolve in the water. In addition to performance, running lower power stresses the plates less, which leads to increased durability and performance – especially over time.

Are the electrodes solid or mesh? Are they dipped or electro-plated?

SmartDesign electrodes are the most advanced solid plate design. They are optimized specifically for efficiency. To achieve the greatest efficiency, they are electro-plated using a process similar to all our other plates.

How does the Athena H₂ DARC cleaning work?

This is a critically important point in regard to H₂ performance. *Double Automatic Reverse Cleaning* or DARC has proven to keep plates clean and therefore performance high – especially over time. This is another huge selling feature. DARC cleaning is also known as "Reverse Polarity" cleaning. Each electrode has either a positive or negative polarity. Reverse polarity simply switches the charge which repels anything that is sticking there. By reversing the alkaline and acidic water flow over the plates, a washing or "bathing" of the electrodes in acidic water takes place. This is the *only* effective way to clean scale. To find out more click [here](#).

Does the DARC cleaning system keep my tubes and flex hose clean?

No. DARC cleaning is an internal process only designed to eliminate mineral scaling *inside* of your ionizer cell. Cleaning for the tubing and flex hose depends on the hardness of your source water. For guidelines in your area, follow the pre-filtration recommendations outlined in the [Hard Water Test Strip Instructions](#). It is also recommended that you run acidic water through the ionizer for 3-5 minutes weekly to help clean scale from tubing/hose. If you notice any slowing down of the water flow rate through your ionizer, then a [vinegar flush](#) is also recommended for cleaning mineral buildup.

What are the plates made of?

SmartDesign electrodes are the highest grade platinum and titanium available. The raw materials come from Japan.

Does the Athena H₂ have any certifications?

The Athena H₂ actually carries more certifications than the old Athena. The certification logos are right on the [web page](#).

What about the filtration?

The filters are superior to our BioStone Plus filters in performance. See the [Filter Results](#). At this time, onboard UltraWater filters are not available for the Athena H₂. There is however an [external UltraWater filter](#) available at no additional charge. We are quite a ways into the developing of onboard UltraWater filters for the Athena H₂ and will announce the release soon. They will be compatible, and customers can upgrade seamlessly to UltraWater filters once they are available.

Does the Athena H₂ come with on-board UltraWater filtration?

Not at this time. However, the Athena H₂ is available in all shopping carts with, or without UltraWater (using an external filter and housing) at no additional charge.

Do we have test results on the factory filters?

Yes we do have results. Please see <https://www.alkaviva.com/pdf/H2-Series-test-results.pdf>

Do the filters add any minerals to the water?

No. The filters do contain a small amount of CaSO₃, or calcium sulfite, the same as in all our filters. It is in the media formulation for chlorine/chloramines and some heavy metal reduction. It is industry standard.

What is the filter life?

Each filter is individually rated for a capacity of 1,000 gallons (filtered acidic and alkaline water combined) this means unlike the original Athena, you conveniently change both filters at the same time.

Do the Athena H₂ filter counters count at the same rate?

Yes. Unlike our old model, that counted water flow at different rates (customers had to replace the filters at different intervals) the new one counts at the same rate, and the filters are replaced at the same time. This is a huge upgrade in customer experience!

Do the Athena H₂ filters get replaced at the same time?

Yes. This upgrade in customer experience cannot be understated.

What are the dimensions and weight?

The full specifications are on the website. The Athena H₂ is approximately the same size as its predecessor. Because it uses a new, advanced SMPS system, it is approximately 30% lighter.

Does the Athena H₂ have a mineral port?

Yes, it is located in the filter. It accepts the same Scale Guard and Calcium baskets as the old model. These are not included with the Athena H₂ and can be ordered separately. In most cases, the scale guard basket is not needed when the EOS Scale Guard filter is used.

Can the Athena H₂ be installed under sink?

Yes. [Undersink Kits](#) are available in both polished chrome and brushed nickel finish.

What is the price of the Athena H₂?

While we have made significant improvements to the Athena H₂, we have been able to maintain the current pricing model. Customers will get a substantially upgraded machine that is more market relevant (especially since it produces a good hydrogen level) for the same price as our previous Athena model!

Where is the Athena H₂ manufactured?

Like our other ionizers, the plates originate in Japan and final assembly of the ionizer is done in South Korea.

What are the selling features of the Athena H₂?

All of the features are highlighted on the [Athena H₂ webpage](#). It can be found the same way the Athena was – through the main navigation or shopping cart.