

GL-988 **VESTA** FAQs

Has IonWays / Emco Tech gone to “bigger is better” by offering nine plates?

No Way! Emco Tech always has and always will outperform the competition by their focus on superior efficiency rather than just using larger, inefficient plates. The Vesta GL has 9 plates, but they are not that much larger proportionately when you compare them to the plate size in our other models with 5 plates. The Vesta GL will outperform everything else because of superior technology, not because Emco Tech has gone toward bigger is better.

Why is Samsung / Emco Tech using solid plates instead of mesh plates? Didn't IonWays say that mesh is best?

Emco Tech was the first to market mesh plates in 2006, with the Orion and Aquarius models. IonWays then made its big splash with mesh plates with the introduction of its Athena in 2007. At that time, Mesh represented the zenith of ionization plating technology, so of course we shouted that from the roof tops. However as we all know so well, technology is *always* evolving and the plating used in the Vesta GL is simply the next evolution in premium ionization technology.

Also, the new advanced technology plates in the Vesta GL were designed so they would work in conjunction with the sophisticated requirements of the new **AutoAdjust™** power delivery system. The collaboration between Samsung and Emco Tech has produced a cutting-edge model that will be the benchmark in water ionization for many years to come.

What can you tell us about the plating technology?

Within about 18 months of introducing the mesh plates in 2006, several other companies had already copied Emco Tech's plating technology. One company for example used some of the principles in their “slotted” plates while another went directly to mesh. To help protect the new technology in the new Vesta GL, we have made the decision to classify the information regarding the plating. Let the Vesta's performance speak for itself!

How exactly does AutoAdjust™ work? Why is it better?

It is really important to understand the answer to this and other questions to see how big a leap the Vesta GL is in ionization technology! Varying mineral content in source water is one of the biggest performance issues in ionization.

Mineral content changes from place to place (often being different within a single municipal supply), from season to season and even from day-to-day. No ionizer has ever been able to overcome this automatically – until now!

Electrical energy is applied to ionizer plates in waves of current. You can think of the waves as a “punch”. When an SMPS power supply delivers its punch, it pulses the current in short bursts. When a transformer delivers its punch, the wave occurs as a long sustained punch. Neither SMPS nor a transformer is capable of adjusting the punch to match the mineral content in *YOUR* water.

Using the advanced self-diagnostic MICOM circuitry system, the Vesta GL’s **AutoAdjust™** monitors the conductivity in your water. Conductivity is determined by the presence of minerals in water. The computer chip gets feedback about the conductivity of the water, and in real-time adjusts the width of the pulses to get the best ionizing results. With **AutoAdjust™**, the electrical energy is pulsed to very short sharp bursts of energy with varying widths. All other ionizers – SMPS models and transformers alike - deliver a programmed and unchanging electrical pulse that does not vary if the conductivity of the water changes. **AutoAdjust™** lengthens the pulse waves (or punch) in soft water situations, and shortens the pulse waves in hard water areas. This effectively means that voltage is optimized automatically in both hard and soft water situations giving you the best performance possible.

Another benefit is in the ionization. **AutoAdjust™** variable pulses are delivered at 512 Hz which creates a big difference when compared with a single wave, or constant pulse. The Vesta’s variable punches allow the electrode to act in a more excited and energetic way. This causes a more active production of oxygen from the electrode and therefore water that is more activated. The result is a bigger change in pH and better ORP in the water (higher pH and more -ORP in alkaline water produced by the ionizer).

The last benefit (but certainly not the least) is as a result of **AutoAdjust™**, calcium and other minerals cannot attach themselves to the electrodes. With the electrodes pulsing on and off so quickly, the minerals don't have the time to form a bond with the metal.

Why has Samsung / Emco Tech chosen the SmartSwitch™ power supply in the Vesta GL instead of a transformer?

Historically Emco Tech was not impressed enough with the stability or reaction time of the older versions of SMPS to employ them. The Vesta GL employs the most-advanced and latest SMPS technology available so **AutoAdjust™** can perform optimally. Previous versions of SMPS used in ionizers did not have a fast enough reaction time to be capable of adjusting pulse width on demand and in real time. This next-generation SMPS used in the Vesta GL is able to deliver that functionality as well as enhanced stability and power saving benefits (it only uses the amount of power necessary). This does not mean there

is anything wrong with a transformer based IonWays ionizer; it just means the Vesta GL takes advantage of the hottest new technological advancement in ionization.

How does the new cleaning system in the Vesta GL compare to the other ionizers and to the DARC cleaning system?

DARC cleaning was, until now, the zenith of ionization cleaning technology. The new Vesta GL offers you the same effective cleaning and convenience. Like DARC, it cleans while you use it, you never have to wait during cleaning and you can rest assured that plates are kept as clean as possible. The Vesta's new user-friendly system cleans two ways. First, it introduces a new twist on continuous cleaning. By working with **AutoAdjust™** it "punches" the electrodes with electrical current so quickly during ionization that calcium and other minerals simply don't have the time to form a bond with the metal. Then, the plates receive an acidic bath after every use for extra insurance. We loved DARC and saw its effectiveness time and time again as our Athena won side-by-side testing. We really love the new Vesta GL's cleaning and think it will prove just as effective, but also offer improved durability due to the elimination of the solenoid valves that ran DARC. Another ingenious first from Emco Tech!

What about the filtration in the Vesta GL?

It is just as important to consider how clean your ionized water is, not just how many plates or much ionization you get from your ionizer! IonWays *has always* led the industry in the quality of filtration and the Vesta continues that tradition! The Vesta like our previous models comes standard with the industry best BioStone filtration system. The Vesta filters are a slightly different size than those in our other models, but they are comprised of the same high quality media. Because of the size difference, the current BioStone Plus will not fit in the Vesta. Also the upcoming BioStone Ultimate will be released by the time you need a filter change in your Vesta GL, ensuring you continue to benefit from the cleanest and healthiest ionization available!

Are the Vesta GL filters the same as all other Emco Tech filters? Will the original Biostone filters fit in the Vesta?

No. As stated above, the Vesta GL's filters offer the same filtration media in the same amounts, but are slightly smaller in the outer casing size. The filters are not interchangeable between models.

Does the Vesta have dual filters like the Athena or is it a single filter ionizer?

Yes – and unlike the Athena, which comes stock from Emco Tech with a sediment filter and a regular BioStone, you get the improved filtration capability of two BioStones!

What is the Vesta GL's Flow Rate?

The Vesta GL's flow rate is up to 3 liters per minute depending on your pressure. The Samsung and Emco Tech engineers designed the Vesta GL for optimal performance (especially on ORP), improved user convenience, functionality, durability and ideal flow rate for domestic use. We think it is the best mixture of performance and convenience!

How does the Vesta GL display pH and ORP?

IonWays has never been an advocate of adding this functionality because pH/ORP displays are only approximations and are never accurate. We recognize how difficult it is to get accurate ORP measurements even with cleaned and calibrated meters! However we also have come to realize two things: 1) that a reading helps customers get an approximate value relative to the setting they have selected, and 2) many popular models continue to include that feature. Based on these factors we decided it was time to keep pace and offer it. The feature works by applying an algorithm that factors in all the variables at each setting to give you an approximate pH/ORP value (at median power delivery for the selected setting). It is best to use the pH/ORP display as a guide in helping you choose the right level of ionization, not for obtaining truly accurate values! For absolute certainty, use the pH drops we include in each Vesta GL and a properly cleaned and calibrated ORP meter. And remember, based on your source water you can always expect some variance in your results!

For under-sink, does the Vesta use the Double Spouted Faucet like the Athena?

The Vesta has a different spout thread pattern so for now, the adapter in the current under sink kit does not work. Therefore the Vesta can only be installed on the counter top with either a diverter or direct connect. Now that we have launched, we will begin working on getting the adapter piece made. We may have other exciting news regarding the Vesta under sink capability down the road over the next few months.