

Water Ionizer Buyer's Guide

by Leo R. McDevitt III

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Water Ionizer Buyer's Guide

An Important Question

When comparing water ionizers, there are two important things to consider. First, consider what your health goals are. Are you trying to improve your health, increase athletic performance?

Things like detoxification and improving sports performance call for a high performance ionizer that can supply high (10 plus) pH alkaline water and a high level of antioxidants (ORP - Oxygen Reduction Potential) to neutralize free radicals. Maintaining good health does not require the highest pH alkaline water- health professionals recommend a pH range of 8 – 9.5 for daily use, but maintaining good health does require a high level of antioxidants.



Why do people drink Alkaline Water?

Improve Health

- Weight Loss
- Antioxidants
- Existing Health Issues
- Improve Hydration
- Detoxification



Athletic Performance

- Neutralizes Lactic Acid
- Greater Endurance
- Increased Performance
- Improves Recovery
- Better Hydration

After you know what your needs are, the second question is: What alkaline water ionizer best fits your needs? This guide will help you answer the second question by informing you about which features to look for in a water ionizer that fits your health goals and your budget.

Important Information about Water Quality

Source water quality affects the quality of water your ionizer makes. Make sure your water ionizer's filters can handle variations in source water quality. Hard water deposits will damage a water ionizer and affect its performance without proper filtration. Reputable water ionizer companies will help you evaluate the quality of your water, and recommend pre-filtration that will address contaminants and prevent hard water damage if you need it.



Overview of Water Ionizer Features

There is a wide range of features to choose from when looking at ionizers. You should make a list of the features that are important to you before you begin shopping. Try to prioritize your list from most important to least important. With your list, you can then find the ionizer that has the features most important to you while staying within your budget.

Features of a water ionizer to consider:







- Low-range 5 plate
- Mid-range –7 Plate
- High quality 9 plate



Performance

- pH levels
- Antioxidant (ORP) levels
- Power



Options

- Countertop or Under the Counter
- Pre-filtration
- MESH Plates
- UV Light Disinfection
- Energy Frequency Technology



Customer Service

- Does the company answer its own phone?
- Knowledgeable Representatives?
- Maintains its own service department?
- Have Technicians available to talk to?



Warranty

- Length of warranty
- Does it cover both parts and labor?



Return Policy

- How long is it for?
- Is the return fee reasonable?

Quality – Low range ionizers have 5 plates; mid range ionizers have 7 plates; high quality ionizers have 9 plates. The advantage that additional plates provide is that they allow the ionizer to reach higher antioxidant ORP levels at pH levels that are appropriate for daily drinking. Nine plate ionizers with higher power provide the highest antioxidant levels at a drinkable pH. This is something to look at when you are addressing health issues.

Options – Do you want your ionizer on the countertop, or under the sink? Pre-filtration is a must, elimination of contaminants and hard water is critical. MESH plates improve pH and ORP levels. UV Light disinfection is effective against bacteria, viruses, and parasite's cysts. If your local water quality is affected by problems like floods, sewage spills, UV Light Disinfection could save your life! Even simple things like color choices can be important.

Performance – The pH and ORP levels an ionizer can reach determine how strong the ionized water it makes will be. If you plan to use your ionizer for health issues; detoxification; or athletic performance enhancement, make sure it can produce strong alkaline (10+ pH) with high antioxidant (ORP) levels (-600 mV or more). This is to neutralize free radicals and prevent cell damage.

Remember – All tap water and bottled waters have a positive ORP which means they are oxidants and cause cell damage. The best ionizers for getting high antioxidant levels at a drinkable pH are 9 plate units with plenty of power.

Return Policy – Most companies allow 30 to 60 days, but Enagic® only gives 3 days. All companies charge a restocking fee; find out how much it is before you buy!

Customer Service – Give the company a call before you buy your ionizer. Find out if they answer their own phones, or do you get a call center? Do they have technicians on staff? Ask a few questions; are their representatives knowledgeable, helpful?

Warranty – A high end ionizer should come with a lifetime warranty on parts and labor. Mid range ionizers typically come with 5, 7 or 10 year warranties. Often the warranty for parts is longer than the warranty for labor on mid range machines.

Finding a Reputable Company

Check out the company that you are buying your ionizer from. How long have they been in business? Are they listed with the BBB? Has the company received any product quality certifications? Are they concerned about the water that goes into your ionizer and do they work with you to provide optimum filtration? Are they endorsed by doctors and athletes? Do they answer the phone when you call them? Are they the manufacturer or just a distributor? These are all important questions that when answered correctly are indicative of a quality company.



Water Ionizer Technology – The Basics

Power Supply



SMPS Power Supply

- Better Power Control
- Reliable/Lasts longer
- Saves Energy
- Runs Cooler
- Optimizes pH & ORP



Transformer

- Failure Prone
- Wastes Energy
- Runs Hotter than SMPS
- Non-adjustable

Power System Quality ionizers will have energy efficient, adjustable SMPS power supplies that allow you to compensate for hard water problems. There are two power systems that used in ionizers today:

SMPS Power System – Switched Mode Power Supply - Used in high definition Plasma and HDTVs, computers, and all energy efficient appliances. SMPS Power Systems are standard in high quality electronics.

Transformers - The problem with transformers is that they must dissipate excess power; they do this in the form of heat. This heat build-up limits the life of the ionizer, wastes energy, and causes early failure of electrical components.

Ionizers that use an SMPS Power Supply













Ionizers that use a Transformer Power Supply



Enagic® SD501
Kangen® Water Ionizer









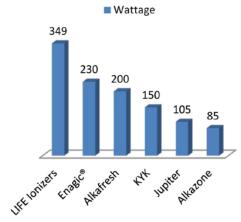
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We recommend you choose an ionizer that uses the SMPS Power System, it makes no sense to purchase an ionizer built with outdated technology.

Note: Alkafresh[™], Alkazone[™], Enagic[®], Jupiter, KYK[™] and LIFE Ionizers[™] are trademarks which are owned by their respective companies.



Ionizer Power Output



- High powered ionizers can produce strong alkaline water (10 or higher pH) for detoxification.
- The best ionizers are able to produce water with an 8 – 9.5 pH range for daily drinking, while maintaining high antioxidant ORP levels.

(The term Enagic® is a registered trademark of Enagic® Co. Ltd.)

- Underpowered ionizers with less than 9 plates will make ionized water that is not optimized for health issues or superior athletic performance.
- For example, there is one 7 plate ionizer requires chemical additives to reach high pH & ORP levels. We suggest avoiding machines that require chemical additives.

pH and ORP -

The machines we tested that performed the best were the ones with over 300 watts of power available. Since most ionizers can produce water with a 10 or higher pH, the best way to look at performance is to look at ORP. Nine plate ionizers with over 300 watts of power tend to produce the highest ORP.



Best pH & ORP

	рН	ORP
LIFE Ionizers™	11.8	854
Alkafresh	10.5	550
Enagic®*	10	612

^{*}Without the use of additive chemicals



Worst pH & ORP

	рН	ORP
KYK	10	450
Alkazone	9.6	312
Jupiter	11.3	470

Adjustable power for optimum performance It is very important to make sure that the ionizer you buy has adjustable settings so you can optimize the performance of your machine. Higher power setting creates higher pH and ORP levels in the water. Adjustable power settings allow you to fine tune the performance of your machine based on your water source and other variations.

Precise power control maximizes the alkalization, ionization and detoxification capabilities of the water produced. If you don't need optimum performance from your ionizer, then a single amperage setting will suffice, but our research shows that an ionizer with adjustable power provides better overall performance since water quality Worldwide can vary.



Adjustable power settings

- Alkafresh™
- KYK Genesis[™]
- LIFE Ionizers[™]

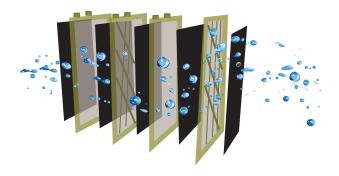


Non-adjustable power settings

- Enagic[®]
- Jupiter[™]
- Alkazone™

Water Ionizer Plates

Ionizer Plates: The ionizer plates are the expensive heart of the machine. Top quality machines have 9 titanium plates; mid range systems have 7 plates, and entry level machines have 5 plates. Ionizer plates are made of titanium, and then they are coated (dipped or sprayed) with platinum.

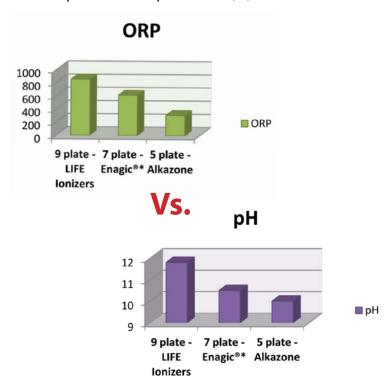


Dipped vs. Sprayed: Ionizer plates dipped in platinum will have a thicker coating than plates that are sprayed. Even better is plates that are "double-dipped" in platinum because they will have the thickest coating of platinum. Sprayed plates do not last as long as dipped plates because their coating is much thinner.

lonizers that have the highest power rating (over 300 watts) also have the thickest (double dipped) coating of platinum in order to ensure that the plates can handle the power. Sprayed plates usually have coatings that are about 50% thinner than dipped plates.

Number of Plates The charts below shows how much better a 9-plate machine performs better than a 7-plate machine. A 9-plate ionizer will also last longer since the additional plates distribute the power more efficiently. A 7-plate machine is adequate for daily use, but the 9-plate system is capable of maximizing the pH and the ORP of drinking water so it will deliver the greatest health benefits.

ORP and pH Level Comparison of 9, 7, and 5 Plate Ionizers



MESH versus Flat Plates: MESH plates will out-perform similarly sized flat plates because of simple physics. Electrolysis occurs more efficiently on the many edges of MESH plates than it does on the smooth surface of flat plates. Another advantage of MESH plates is that the water flowing in and out of the MESH surface provides longer contact time and therefore increases the amount of electrolysis which occurs. Our testing confirmed both of these facts, we found that the MESH plates performed consistently better, providing about 5–10% better pH and ORP readings.



Size of the Plates Many ionizer manufacturers will argue that bigger is better, and this is true up to a point. Large plates are better *if there is an adequate power supply to power them*. This is why we recommended earlier that you choose an ionizer with at least 300 watts of power.

Comparison of Ionizer Plates

Our research shows the SMPS Power System provides more power and has the ability to provide higher pH and ORP water. We recommend that you choose a higher powered system with adjustable amperage, and double-dipped plates MESH Plates. An ionizer with higher power and MESH plates will outperform an ionizer with larger flat plates and less power.

Ionizer Plate Comparison – Top of the line models

lonizer	Plates	Platinum Coating	Thickness	MESH
Alkafresh™	5	Double Dipped	.25	Optional
Alkazone™	5	Sprayed	.15	Not Available
Enagic®	7	Dipped	.20	Not Available
Jupiter™	5	Sprayed	.10	Standard
KYK Genesis™	7	Dipped	.15	Slotted
LIFE Ionizers™	9	Double Dipped	.25	Optional

Ionizer Filtration

As we mentioned earlier, water quality is very important, and poor or inadequate filtration can result in a machine that doesn't last very long, or one that produces unhealthy water! Hard water isn't the only problem you need to be concerned about, nearly all tap water and well water supplies are contaminated with toxic chemicals.



Ionizer Filter

Filtration is the all-important feature that determines how many contaminants are removed from your source water. If you are on city/county treated water, along with harmful contaminants is the concentration of chlorine, chloramines and other severe sanitizing chemicals that are used in municipal water systems disinfecting processes.

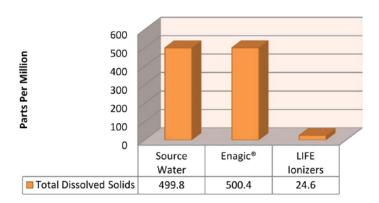


There is a new concern as well for heavy metals, psychiatric drugs and other contaminants being flushed into water systems nationwide. The better your filtration system, the safer your family is from con-

taminants, bacteria and sediment in most water systems. Some of the systems we reviewed and tested had single internal filter systems; some had dual internal filter systems. We recommend you avoid single filter systems, because none of them perform well when it comes to making your water clean and safe.

Warning: The filters used in water ionizers made by Enagic® Kangen® do not reduce levels of heavy metal ions and salt found in tap water! These machines also may only reduce chlorine levels by 80%, which is inadequate. (Source: Enagic® website)

Total Dissolved Solids



This chart compares the single filter Enagic® with the multiple filter LIFE Ionizers™.

Amazingly, our tests showed that the Enagic® machine actually made the water quality slightly worse!

The best filtration is provided by ionizers with dual internal filters and an additional pre-filter for the highest level of filtration. The best companies will provide you with a free water report on your source water so that you know what potential contaminants you are dealing with. If there are problems, the company should provide you a free pre-filter to clean up the water before it goes into the ionizer's internal filter system.

Reverse Osmosis If you have severe water problems you may need to use a reverse osmosis (RO) system to purify your water. In order to use an ionizer with an RO system, you *must* use a mineral cartridge to re-mineralize the water. Water treated by RO has minimal minerals in it, and therefore it cannot be ionized well unless you remineralize it. You **must** remineralize water treated by RO before you drink it! Research has shown that mineral deficient water will steal minerals from your body and lead to health issues.

lonizer	Number of Inter- nal Filters	Pre-Filtration
LIFE Ionizers™	2	Free - included with purchase
Alkafresh™	2	Free - included with purchase
KYK Genesis™	2	Optional
Jupiter™	2	Optional
Alkazone™*	2	Optional
Enagic®	1	Optional

^{*}Alkazone replacement filters are the most expensive of all machines we reviewed.

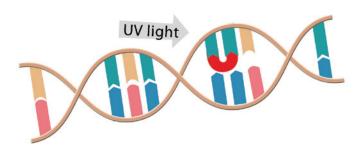
Water Ionizer Options

Pre-Filtration We have discussed pre-filtration several times in this guide for a very good reason. Regardless of where you live, it is very likely that you have one or more toxins in your water, and if you live in the Western United States or Canada, you can have hard water. We consider pre-filtration mandatory in order to protect your investment in your water ionizer, and to ensure that your water is clean and healthy. Regardless of which brand of ionizer you buy, we urge you to use pre-filtration for your own safety.



Pre-filter & Cartridge

UV Light Technology Many municipal and private water companies are switching to Ultraviolet (UV) light disinfection as an alternative to chemicals for disinfecting public water supplies because it is approved by the Environmental Protection Agency.



UV Light Disinfection works by damaging bacteria DNA

The county of Orange County California is the largest public utility to use UV Light treatment to make public water supplies safe. UV Light disinfection provides safe water for millions of people in Southern California and other locations worldwide.

UV light technology exposes water to UV light which addresses several kinds of biological contaminants in water plus it is effective against the cysts that parasites create. Infected water can give you an upset stomach, and studies have shown that the gastric upset caused by infected tap water leads to many other more serious diseases.

Well water users are at the highest risk for drinking infected water, and homes on rural water supplies are not much better off. Because of the serious threat posed to your health by drinking infected water, we highly recommend opting for UV Light technology with your ionizer.

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Countertop vs. Under the Counter



Counter top vs. Under the Counter This option is a matter of personal preference. Counter top ionizers are desirable if you want to travel with your ionizer, because you can easily disconnect it and take elsewhere. If you want to keep your countertops clear, you should opt for the under counter option. There is another option that is offered by LIFE lonizers – a "convertible" ionizer that can be installed under the counter and then disconnected to be used as a counter top ionizer. Great when travelling or if you have a vacation home!

Warning: There are several companies that have under the counter conversion kits, but **beware**, not all conversion kits are legal for use in all 50 states! Prior to purchasing an ionizer for under the counter use, you should make sure that the ionizers' under the counter "hook up" is legal for use where you live.

lonizer	Pre-Filtration	UV Light	Countertop/ UnderCounter
LIFE Ionizers™	Standard	Available	Available
Alkafresh™	Standard	Available	Available
Jupiter™	Optional	Not Available	Available
KYK Genesis™	Optional	Not Available	Not Available
Alkazone™	Optional	Not Available	Not Available
Enagic®	Optional	Not Available	Available

Water Ionizer Quality

Before buying an ionizer, there are things you can check that will allow you to determine if the ionizer you are looking at is well-made, safe to use, and whether the company that sells it is a reputable dealer.

Certifications Industry certifications are your guarantee that an ionizer has met stringent standards for quality and safety:



WQA - Water Quality Association

 Their "lead-free" certificate certifies that the water produced by an ionizer is lead-free and meets the highest standards for safety. We consider this certification to be very important and required by law in California and Vermont. **KFDA - Korea Food and Drug Administration** The US and Europe lag far behind Asian countries in public health and wellness. In Korea, water ionizers are used as medical devices, and KFDA certification means that an ionizer is certified for use as a medical device in Korea.

ISO International Organization for Standardization – This certification means that the company uses sound management practices.

CE – European Conformity The CE marking is a mandatory conformity mark on many products placed on the single market in the European Economic Area (EEA). The CE marking certifies that a product has met EU consumer safety, health or environmental requirements.

IEC - International Electrotechnical Commission - The IEC is the world's leading organization that prepares and publishes International Standards for all electrical, electronic and related technologies. The IEC also manages conformity assessment systems that certify that equipment, systems or components conform to its International Standards.

BBB – Better Business Bureau - Nationally recognized as certification of sound business practices.

Other Things to Consider

Testimonials and Endorsements: These are subjective opinions, and may be motivated by other considerations. Normally all the ones we have seen are about the great health results people have attained. If a company has been in business for a while, testimonials can be a good indicator of customer satisfaction. More credibility should be given to professional athletes and health practitioners.



Length of time in business: The length of time the distributor has been in business and how they treat their customers is very important. Look for a company that has been around at least 5 to 10 or more years, and has an established business presence. It is even better if they have offices Worldwide as this shows that their brand is well accepted.

Keep in mind: If a company closes up, they will not be around to honor your warranty or supply your filters!



Multi Level Marketing Beware of MLM companies, their products might be fine but you don't get the best value through them because their prices are inflated due to their multi-layered payout systems. Also,

MLM companies are not water filtration companies – they only sell ionizers. Therefore theeir unitl do not he lastest innovations and are behind the time.

How Long Has the Company Been Distributing in North America? It takes at least 1 to 2 years for a new company to get all the "kinks" out of it and get things running optimally. So if a new company comes out, it is best to wait until it has proven itself.

Return Policies and Warranties

Return Policies - Before you purchase an ionizer, you should find out what the company's return policy is. We know of one company that has only a 3-day return policy, and they demand an \$800 restocking fee! Reputable companies will accept returns for up to 60 days. All companies charge restocking fees, you should make sure you know how much they charge before you make a purchase – 15% is standard.

Warranties – A high quality ionizer should last you a lifetime, because of this, it just makes sense that a high quality ionizer's warranty should also last a lifetime. Our research has shown that **all** high quality ionizers with lifetime warranties share some common features:

- SMPS Power Transformers do not last a lifetime.
- Nine lonizer plates that are double-dipped in platinum
 Sprayed plates don't last.
- Multiple internal filters and pre-filtration lonizers with inadequate filtration will succumb to hard water damage.
- Companies have been in business for over 10 years

You should expect an ionizer that has the features described above to come with an unlimited lifetime warranty on **both** parts and labor. If a company is willing to guarantee both parts and labor on their ionizer for life, that is an excellent indicator that they believe in their product. An unlimited lifetime warranty gives you the peace of mind you deserve when investing in a high end ionizer.

lonizer	Return Policy	Warranty
LIFE Ionizers™	60 Day	Lifetime Parts/ Labor
Jupiter™	60 Day	Lifetime Parts, 5 Years Labor
Alkafresh™	60 Day	7 Years Parts/Labor
KYK™	60 Day	5 Years Parts/Labor
Enagic®	3 Day	5 Years Parts/Labor
Alkazone™	7 Days	2 Years Parts/Labor



Budget Considerations

Water Ionizers in the \$500 to \$995 range

These models are the low-end systems and are the basic entry levels machines in the market place. The quality of the components and materials is sacrificed to keep the price down. They normally have a shorter warranty period as well. All of these use the old-fashioned transformers and have 5 or fewer plates and the platinum coating is thinner than higher quality models. They are definitely "bare bones" models without many important features or functions of the better models. Their performance is also relatively low and their rate of returns for warranty defects is high. We recommend you avoid ionizers in this range.

Water Ionizers in the \$1000 to \$2000 range

These are the reliable mid-range models that provide pH and ORP levels that are adequate for a person who wants to maintain their present-day good health. Look for 5 -7 plates and an SMPS Power System. Models at the low end of this range often have only one internal filter, and their filtration is not adequate if your source water is below par. Models toward the top of this range will offer some of the functions and features that the high end models have.

Water Ionizers in the \$2000 to \$3000 range

These models normally use the higher quality materials and incorporate many of the best functions and features. Look for 9 plates in this price range and for the higher quality SMPS Power System. In general these ionizers will provide the best results and are for people who have health challenges or who are looking to optimize their health or sports performance. Some units in the higher price range incorporate a new technology that generates high antioxidant (ORP) at a drinkable pH. This is very important so look for this feature as only one company has it.

In this range, you will find a variety of functions and options that will enhance the performance of your water ionizer. The under counter versions of these machines will typically run about \$500 to \$600 above what their counter top version costs.

Water Ionizers over \$3000

Home ionizers that cost over \$3000 (such as Enagic®) are overpriced, usually because they are sold through an MLM system. Commercial-grade ionizers do cost more than \$3000, but they also produce significantly more water than home ionizers and their extra cost reflects the materials used to build them.

We hope this information has been helpful to you. If you would like more information on ionizers, we recommend you contact a Water Ionizer Expert. Here are two recommendations:

Carlos - www.ExpertoDeAguaalcalina.com - 800-696-8908 James – www.WaterlonizerExpert.com - 800-920-3792

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