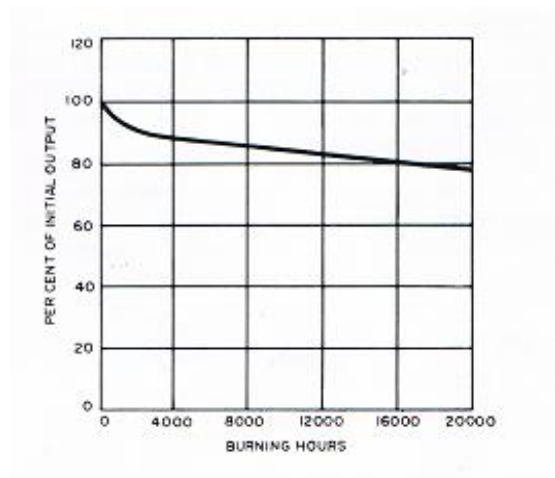
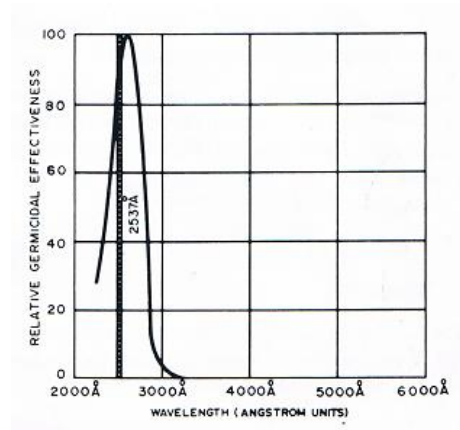


# AquaNomics<sup>®</sup> Ultraviolet Sterilizer

Ultraviolet radiation at the 254nm wave length has the unique property of killing all the micro-organism that comes in contact with. The UV ray penetrate the organisms and destroy the DNA molecules that are the make up of all living cells.

Water exposed to UV energy can be made bacterias free without altering its physical or chemical properties. This fact makes UV the ideal purifications system for industrial applications.

Bacteria and viruses cause the major water borne pathogenic diseases. Of these, enteric virouses, hepatitis virus and legionella pareumophilia can be resistant to chlorine, but are readily eliminated by UV treatment. Chlorine can also form THM's (trihalomethanes know to be carcenogenic) in drinking water whereas UV does not produce any toxic by products.



Model : AQ20X split panel type



Capacity : 108,000 LPH

## What is Ultraviolet Energy ?

Electromagnetic or radiant energy is one of the several categories of energy. In the form of waves, radiant energy travels in straight line paths and in all directions from its source. The wavelengths range from very long radio waves to very short X-ray.

The most familiar part of the spectrum is a narrow band of wavelengths visible to the human eye. Another band with wavelengths shorter than those of visible light, not visible to the eye, is the ultraviolet part of the spectrum.

These are basically three types of ultraviolet energy, grouped according to wavelength : “long”, “middle” and “short” wave ultraviolet.

The ultraviolet spectrum includes wavelengths from 2000nm to 3900nm Angstrom units(A). One unit is one ten billionth of a meter while the 2000 to 3900 A range may be divided into three segments.

### Long-wave Ultraviolet

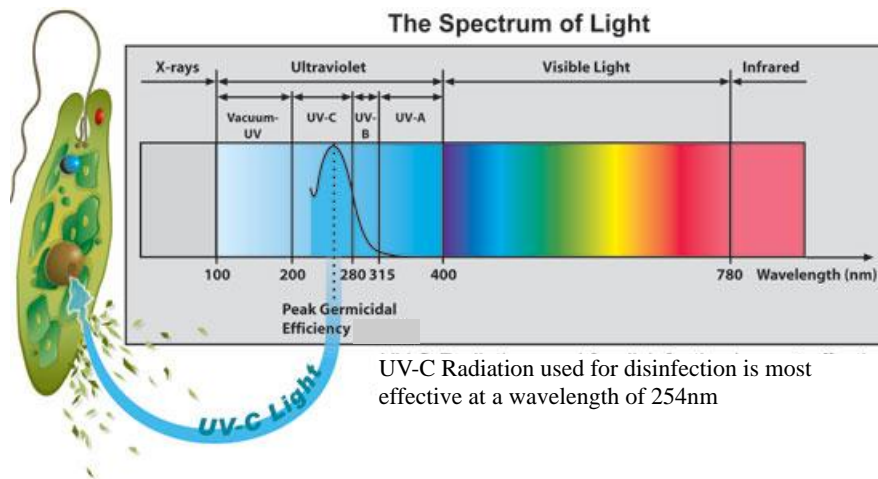
The wavelength range is 3250 to 3900 A. these rays occur in sunlight. They have little germicidal value.

### Middle-wave Ultraviolet

The wavelength range is 2950 to 3250 A, also found in sunlight. Middle-wave UV is best known for its sun tanning effect. It provides some germicidal action, with sufficient exposure

### Short-wave Ultraviolet

The wavelength range is 2000 to 2950 A. this segment possesses by far the greatest germicidal effectiveness of all ultraviolet wavelengths. It is employed extensively to destroy bacteria, virus, mold spores...etc., both air and water borne. 2357 A is consideration peak intensity of the germicidal spectrum of the short-wave ultraviolet.



The unique advantage of the UV method of the sterilization of liquid is that nothing is added to the liquid

### The application of UV sterilization includes :

- UV sterilization produces germ-free potable water for home, institution and commercial use
- It provides bacteria-free food process water without the user of germicidal oxidants, algacides or chemical precipitants, particularly applicable where chlorine adversely affects flavor
- UV sterilization is particularly useful in application where, chlorine-free, de-ionized and /or carbon filtered water are extensively employed. Unattended carbon filters and ion-exchanger tanks act as incubators for bacteria accumulation.
- In industrial pollution control it gives an excellent end-treatment for positive protection in wastewater control system

# AquaNomics® Ultraviolet Water Sterilizers

## Specification of Standard Models

<i>Model</i>	<i>Capacity (LPH)</i>	<i>Power (Watt)</i>	<i>In / Outlet (mm)</i>	<i>Size (W x D x H)mm</i>	<i>Net Weight (kgs)</i>
AQ-200	200	10	16 mm	320 x 110 x 420	5
AQ-300	300	20	16mm	410 x 120 x 470	8
AQ-480	480	20	16mm	355 x 152 x 685	13
AQ-1200	1200	50	20mm	355 x 152 x 1170	25
<b>Commercial &amp; Industrial Unit</b>					
AQ-2L	2400	100	40mm	1360 x 335 x 310	48
AQ-3L	6600	150	50mm	1360 x 335 x 310	50
AQ-4L	13200	200	50mm	1360 x 425 x 400	60
AQ-6L	22000	300	50mm	1360 x 425 x 400	80
AQ-8L	30800	400	80mm	1360 x 810 x 450	90
AQ-12L	44000	600	100mm	1360 x 810 x 760	160
AQ-16L	61600	800	100mm	1360 x 510 x 1220	180
AQ-24L	92400	1200	100mm	1360 x 790 x 1220	280
AQ-32L	123200	1600	150mm	To Spec.	
AQ-40L	154000	2000	150mm	To Spec.	
<b>Extra Long Series (Single chamber type)</b>					
AQ-6X	36000	480	80mm	425 x 450 x 1800	90
AQ-8X	48000	640	100mm	425 x 450 x 1800	100
AQ-10X	60000	800	100mm	600 x 550x 1800	120
AQ-12X	72000	960	100mm	600 x 550x 1800	140
AQ-16X	84000	1280	150mm	To Spec	150
<b>Extra Long Series (Multi-chamber type)</b>					
AQ-20X	120000	1600	200mm	To Spec	200
AQ-24X	144000	1920	200mm	To Spec	240
AQ-30X	180000	2400	250mm	To Spec	300

Standard units are in stainless steel construction

- UV Chamber - SS316
- Electric cabinet and frame - SS304

Standard features :

- UV lamps electrical status
- Lamp fail indication
- non-resettable running time counter

Optional features :

- UV intensity meter,
- High temperature cut-off
- Auxiliary contact for shut-off

**\*\* For product improvement purpose, the manufacturer reserves the right to the change of specification without prior notice**