

UVC LED Fluid Treatment System

Aquarium ♦ Swimming pool ♦ Fountain ♦ Water dispenser



Caution UV-C emitted from this product May cause eye or skin damage if pointed directly at the eye or skin. Keep out of reach of children. Please follow instruction for correct use



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Customers want to know about UVC

01

Can UVC LED substitute the Mercury ?

02

How much Dosage required?

03

How to install?

04

Real time monitor?

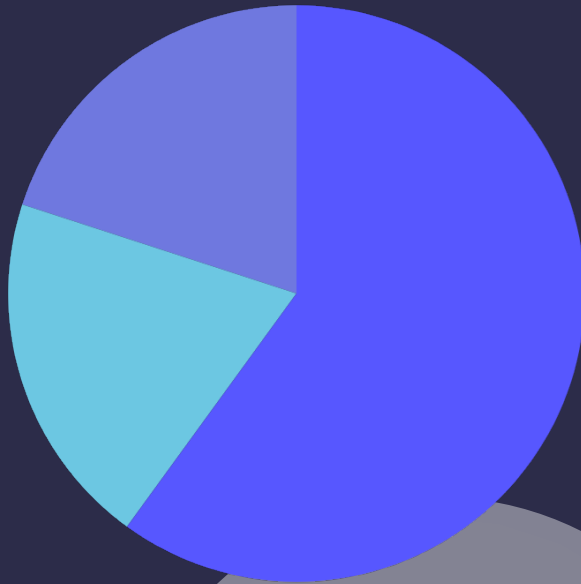
05

When have to replace the parts? And cost?

06

Pros and Cons?

Customers care about



60%

Effective

We have on-site cases and enough third party datas to convince our customers.

20%

Cost

In our new design, customers spend inexpensive for module and saving more energy..

20%

Replace

When the indicator alarms, it's time to change the UVC light source.



UVC Fluid Treatment System

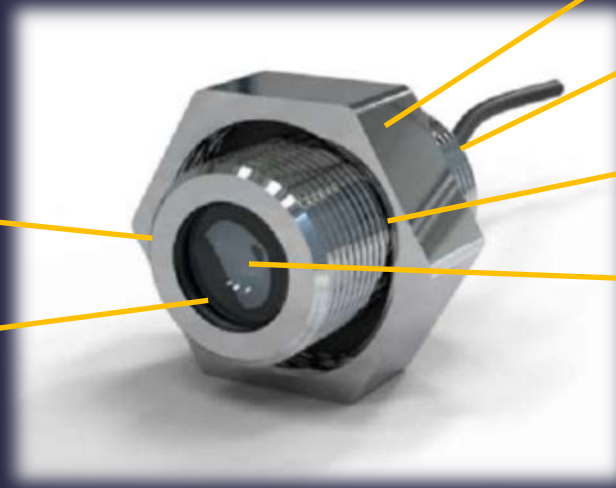
We have work out the latest sterilization system.

| | |
|--------------------------|--|
| Eco-Friendly | UVC LEDs advantage: compact size, flexible adoption and extended lifespan. |
| Enough Dosage | All the treatment modules work with average dosage exceeding 30 mJ/cm ² . |
| Efficient | Parallel UVC LED lighting can be seamlessly integrated into different home appliances. |
| Tiny device | The latest design has minimized the required dimensional area with sufficient radiant irradiance. |
| Heatsink solution | With the enhanced UVC light, but there is no longer a need for fans or coolers. |
| Energy Saving | With its compact size and powerful dosage, the device offers significantly reduced power consumptions. |

UVC Light Source Design

Waterproof

Silica optics



Food grade SUS 316

Water cooling system

Taiwan UVC LED chips

Patented optical design

Do not look directly at the UVC light source without adequate eye protection.



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3 Basic Module Types / Flow rate



#Acutus : 7 L/min



#Orthos : 15 L/min

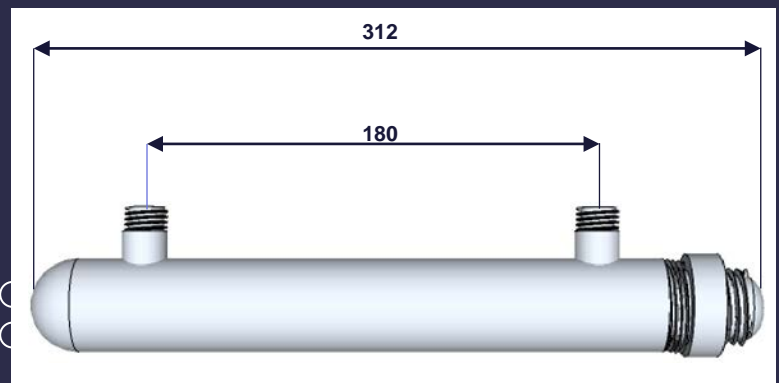


#Acanthos : 60 L/min

We offer 3 basic module types designed for various flow rate and fluid sterilization purposes, seamlessly to integrated with water dispenser systems.

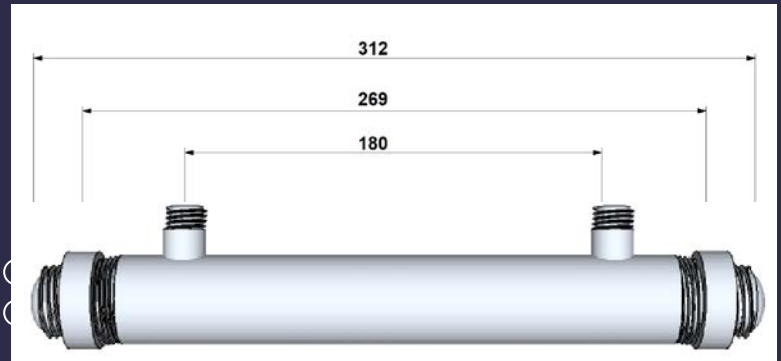
Module : Acutus

| | |
|-------------------|-------------|
| Flow rate | 7.5 L/min |
| Power | 5W |
| Product Dimension | Φ37 * 275mm |
| Inlet Diameter | ½ Inch |
| Lifespan | 8000 Hrs up |
| Pressure inside | 10 Bar |
| UVC module | 1 terminal |
| Fluid Sensor | Available |
| Power | Available |



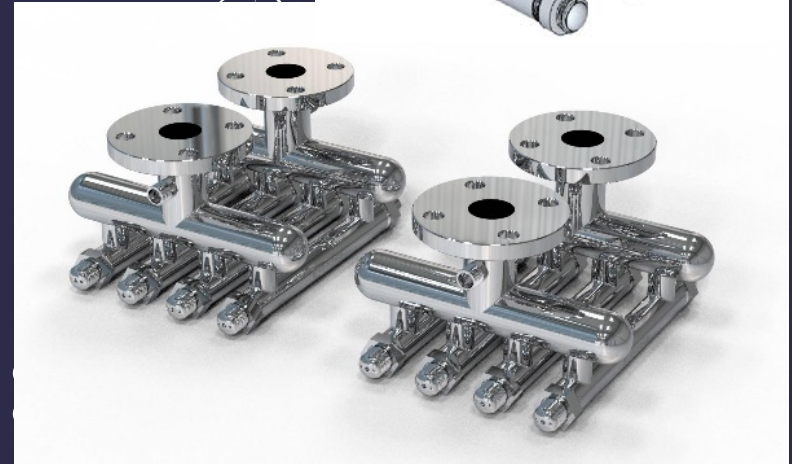
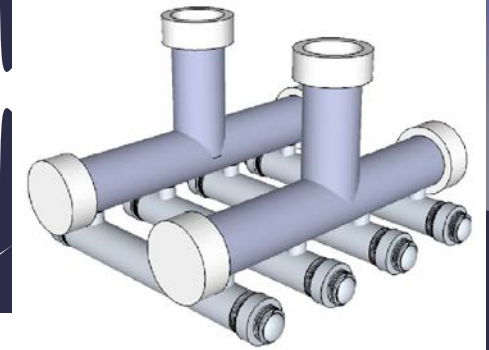
Module : Orthos

| | |
|-------------------|-------------|
| Flow rate | 15 L/min |
| Power | 10W |
| Product Dimension | Φ37 * 295mm |
| Inlet Diameter | ½ Inch |
| Lifespan | 8000 Hrs up |
| Pressure inside | 10 Bar |
| UVC module | 2 terminal |
| Fluid Sensor | Available |
| Power | Available |



Module : Acanthos

| | |
|-------------------|-------------|
| Flow rate | 60 L/min |
| Power | 80W |
| Product Dimension | 750mm |
| Inlet Diameter | 1½ Inch |
| Lifespan | 8000 Hrs up |
| Pressure inside | 10 Bar |
| UVC module | 2 terminal |
| Fluid Sensor | Available |
| Power | Available |



Accessory

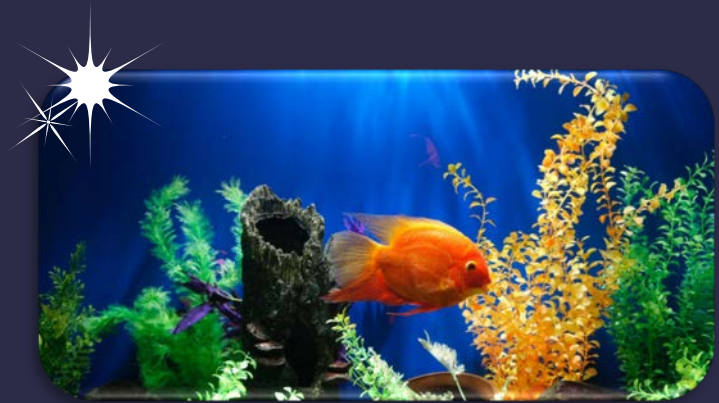


- **UVC working sensor**
 - each UVC light source can be monitored in-time, we have 16-channel control board for effective management and control.
- **UVC protection sensor**
 - When the fluid exceeds 40°C, the self-protection mechanism will be activated to prevent any damage to the UVC LEDs.
- **Lifespan indicator**
 - When the UVC light source reaches the end of its lifespan, the indicator will notify end users to replace it.
- **Fluid sensor**
 - The UVC light source will always be active when the fluid sensor is activated.



Photo showcase

UVC LED-based fluid treatment system can be applied in under-the-sink and dispensing system.



Thanks!

Do you have any questions?

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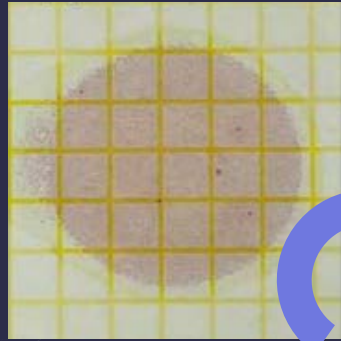


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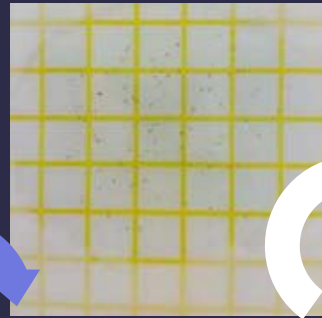


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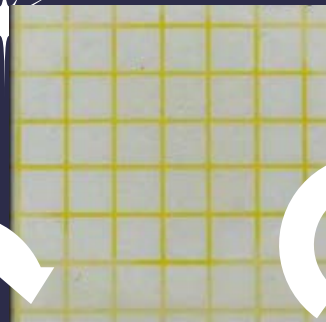
Appendix 1 : SPA Pool Real Site(#Acanthos)



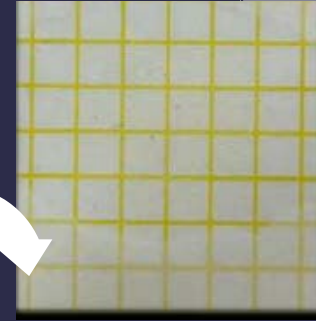
Pretest:
 10^6 CFU/mL
The original data
before UVC installation.



D-Day:
146 CFU/ml
Using UVC SYS for
24 Hrs

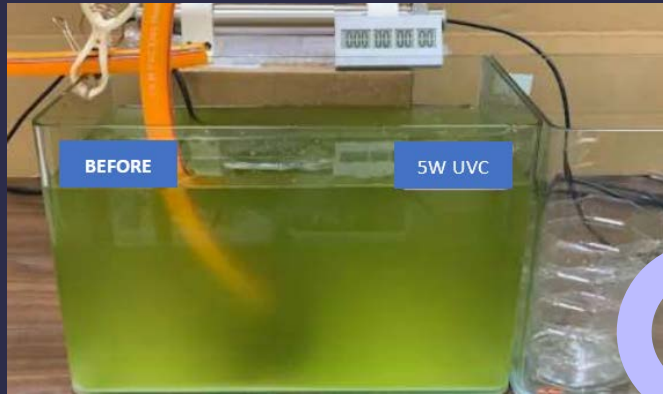


6 Days after D-day:
1 CFU/mL
UVC SYS. + 0.5 ppm Cl

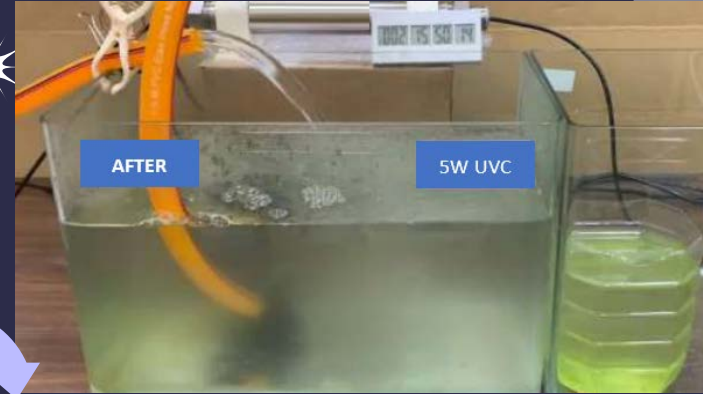


19 Days after D-day:
2 CFU/mL
UVC SYS. + Regular Cl 1
~ 1.5 ppm

Appendix 2 : Fish Tank Test (#Acutus)



Pretest:
Deep green water and lots of fishy smell.



60 Hours later
Clear and lower the fish stinks.



Appendix 3 : UVC LED Fluid Treatment System

| Products | Acutus | Orthos | Acanthos |
|----------------|--|-----------------|---------------|
| Light source | 1 piece | 2 pieces | 8 pieces |
| Power | 5W | 10W | 40W |
| Dimension(LWH) | 29.6*4.1*5.8 cm | 33.7*4.1*5.8 cm | 33.7*35*25 cm |
| Flow rate | 7 L/min | 15 L/min | 60 L/min |
| Weight (tube) | 600 g | 640 g | 5 kgs |
| Voltage | 100~240VAC | | |
| Wavelength | 265~280nm | | |
| Prohibition | Frozen water [When flowing sensor stops, the light source enter standby.] | | |



UVC Fluid Treatment System Structure

