

Technology Applications

UV Drinking Water Purification and Disinfection - Patent Approved
(Click to enlarge)

— Line of evolution

- • Drinking water
- • Industrial pure water

(Click to enlarge) Ultraviolet Light - Patent Approved

— In the ultraviolet light spectrum, applications include, in general, the rapid eradication of all known and unknown viruses and bacteria.

— Remote Light owns outright over 40 US and International UV patents that give it the exclusive right to use optics with UV light. Optics allow UV to work in minutes and seconds rather than hours and days.

— The RL UV design has been tested and compared to the conventional UV system. The Remote Light design exhibits superior performance and lower risk in operation at the same initial cost as the conventional system. Some of the highlights are listed below.

- • RL system has the same initial cost as the conventional system.
- • RL system uses 25 times less electrical energy than the conventional system.
- • RL system delivers 99% of the UV output in the desired wavelength for germicidal impact, a 15 times improvement in the desired wavelength.
- • RL system reduces maintenance and operational risk because the lamp is not submerged in the water. Remote Light UVD

Conventional UV Lamp Configuration

Non submersed (proprietary)

Submersed Power Usage

14 WATT 55 WATT Lamp Life

6,000 hrs

5,500 hrs

%UV 254 Output

>99.0

5.8 Maintenance/Cleaning Non Fouling

Fouling Inactivation Efficiency

1.7x10³/1hr Continuous Hazard Potential

None Hg Salts Contamination

Cost \$303

\$300

Note: Output Remote Light System: max. >170-microwatts/sq cm, min. 74-microwatt/sq cm — The Remote Light UV Disinfection System (RLDS) kills bacteria to below EPA Safe Drinking Water Requirements. The RLDS uses 25 times less electricity than required to power conventional systems. This design includes a timer feature that saves energy while maintaining safe drinking water. The system may be configured with an optional backup battery.* These tests were performed using EPA standards by Kurt Garrett, Former National Science Foundation Fellow, Duke University. {mospagebreak title=Wastewater and Other Fluids}

UV Wastewater Purification and Disinfection System - Patent Approved

— Animal waste management
(Click to enlarge)

— Human waste management
(Click to enlarge)

— Line of evolution

- • Animal waste
- • Human waste
- • Industrial waste

(Click to enlarge) UV Purification and Disinfection of Other Fluids - Patent Approved

{mospagebreak title=Air Purification and Disinfection} UV Air Purification and Disinfection - Patent Approved Air Purifier:
UV Filtration Device

— Line of evolution

- • Commercial applications.

- • Other purification products.

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{mospagebreak title=Medical & Appliance Disinfection}Medical Applications - Patents Approved and Patents Pending

- • Cardiac De-Block

- • Skin treatments for surface

- • Whole blood purification

UV Appliance Purification and Disinfection - Patent Approved

(Click to enlarge){mospagebreak title=Infrared Wavelength}Convergence Technology for Light, Voice, and Data Communication -

Infrared Wavelength - Patent Pending

— In the infrared light spectrum, applications include the dual use of optical fiber to:

- • Transport both visible light for illumination and infrared light for voice and data communication.

– Visible light includes both man-made light and solar, i.e. natural sunlight.

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