

UVGI FOR HANDPUMPS AND SUBMERSIBLES

Delivering state of the art Ultraviolet Germicidal Irradiation (UVGI)
products for safe drinking water



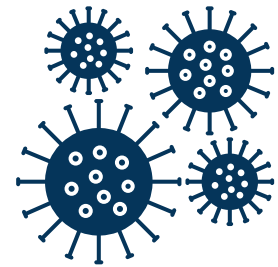
www.finsenritter.com

contact@finsenritter.com

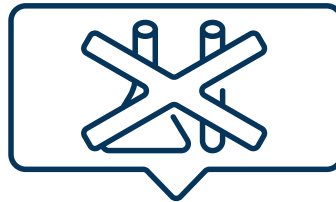
Features



Fully Automated System



deactivates bacteria, viruses, yeast, and mold spores



No Chemicals, No by Products



Easy Installation



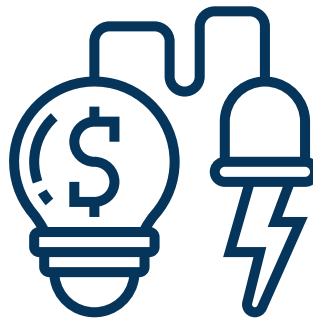
Saves Power



Cost Effective



Cloud Integration & Electronic Control Panel



Low Energy Cost



Certified Product

Design



Solar Powered

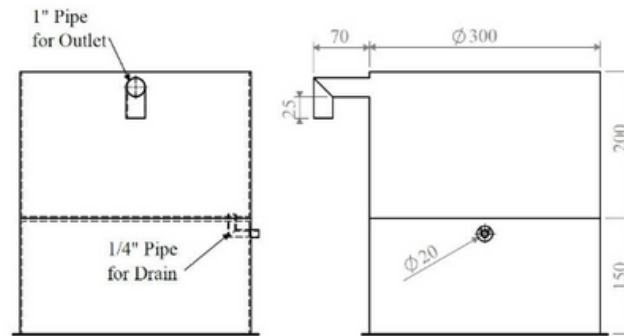


Cost Effective

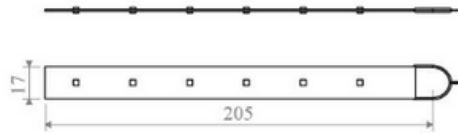


Cloud Integration
& Electronic
Control Panel

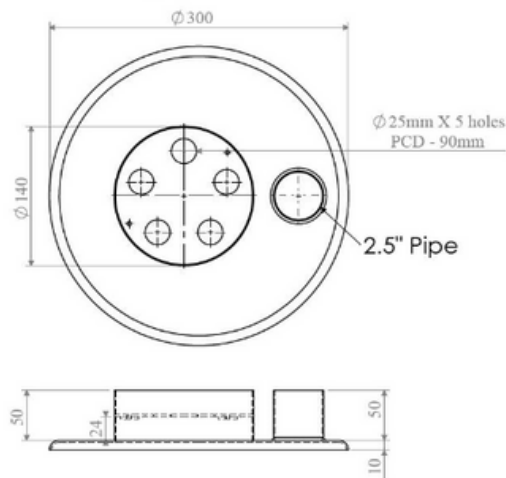
DESIGN



UV LED 24V



Tank Top



Quartz Tube



Application



Water tanks



Well, cisterns, rainwater barrels

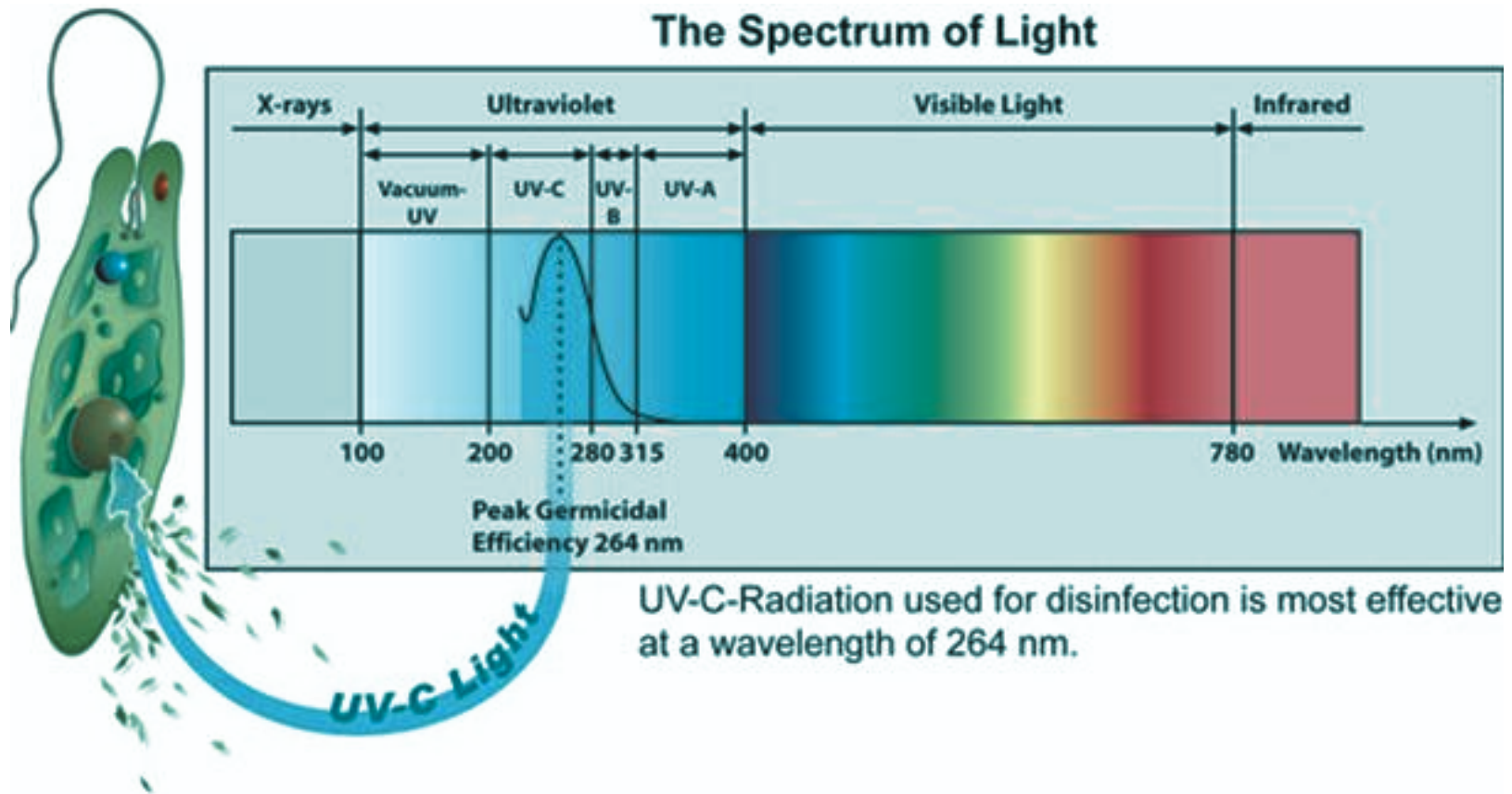


Air Conditioning, Air Scrubber



Industrial Process

VALUE OF LIGHT



Germicidal Ultraviolet light (UVC) is a CDC approved physical disinfectant that is highly effective against microorganisms such as bacteria and viruses. The most common UVC lamps emit UVC at a wavelength of around 254nm, which closely matches the peak absorbance of nucleic acids (DNA/RNA) which is around 260nm. The nucleic acids of bacteria and viruses strongly absorb UVC light and are effectively inactivated.

Table 1. Estimated Irradiation Time to Inactivate Microorganisms at a Dosage of 30,000 $\mu\text{watt-sec}/\text{cm}^2$ of UV 254 nm

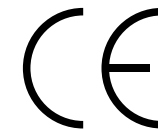


Name	100% lethal Dosage (Second)	Name	100% lethal Dosage (Second)
Bacteria			
Dysentery bacilli	0.15	Micrococcus Candidus	0.4 °C 1.53
Leptospira SPP	0.2	Salmonella Paratyphi	0.41
Legionella Pneumophila	0.2	Mycobacterium Tuberculosis	0.41
Corynebacterium Diphtheriae	0.25	Streptococcus Haemolyticus	0.45
Shigella Dysenteriae	0.28	Salmonella Enteritidis	0.51
Bacillus Anthracis	0.3	Salmonella Typhimurium	0.53
Clostridium Tetani	0.33	Vibrio Cholerae	0.64
Escherichia coli	0.36	Clostridium Tetani	0.8
Pseudomonas Aeruginosa	0.37	Staphylococcus Albus	1.23
Virus			
Coxsackie Virus A9	0.08	Echovirus 1	0.73
Adenovirus 3	0.1	Hepatitis B Virus	0.73
Bacteriophage	0.2	Echovirus 11	0.75
Influenza	0.23	Poliovirus 1	0.8
Rotavirus SA 11	0.52	Tobacco Mosaic	16
Mold Spores			
Mucor Mucedo	0.23 °C 4.67	Penicillium Roqueforti	0.87 - 2.93
Oospora Lactis	0.33	Penicillium Chrysogenum	2.0 °C 3.33
Aspergillus Amstelodami	0.73 °C 8.80	Aspergillus Niger	6.67
Penicillium Digitatum	0.87	Manure Fungi	8
Algae			
Chlorella Vulgaris	0.93	Protozoa	4 - 6.70
Green Algae	1.22	Paramecium	7.3
Nematode Eggs	3.4	Blue-Green Algae	10 °C 40

OUR CORPORATE CLIENTS



AVANTHA



For more information visit:
www.finsenritter.com

Email us: contact@finsenritter.com

Monish Gaikwad (COO)
+91-7999409559

Satish Dev (HBD)
+91-9424086952

ABOUT THE COMPANY

OUR TRIBUTE



NIELS RYBERG FINSEN

15 December 1860 – 24 September 1904

He was one of the pioneers to use UV light in medicine. In 1903, he was awarded the Nobel Prize in Medicine and Physiology "in recognition of his contribution to the treatment of diseases, especially lupus vulgaris, with concentrated light radiation, whereby he has opened a new avenue for medical science."



JOHANN WILHELM RITTER

16 December 1776 – 23 January 1810

Johann Wilhelm

Ritter was a German chemist, physicist and philosopher. He was one of the first to document the UV rays. In 1801, after hearing about the discovery of "heat rays" (infrared radiation) by William Herschel (in 1800), Ritter looked for an opposite (cooling) radiation at the other end of the visible spectrum. He did not find exactly what he expected to find, but after a series of attempts he noticed that silver chloride was transformed faster from white to black when it was placed at the dark region of the Sun's spectrum, close to its violet end. The "chemical rays" found by him were afterwards called ultraviolet radiation

