

GUV C Series

Ultraviolet Water Disinfection Systems



ULTRAVIOLET DISINFECTION

The technology uses UV light to target and disable disease causing microorganisms (pathogens). When you expose pathogens to UV light, their reproduction is limited. The UV lamp produces light in the UVC range of the light spectrum. Specifically, light in the 254 nanometer (nm) range is an effective wavelength.

When water pathogens are exposed to UV light, their cells become damaged and this damage inhibits reproduction. The UV light, damages the cell's DNA and RNA and once damaged, they are unable to replicate. This physical process renders them harmless. The amount of damage is a result of the intensity of the UVC output multiplied by the time the water is exposed to the light. The applied dosage is commonly referred to as microwatts and is often expressed as mJ/cm².

SYSTEM OVERVIEW

GUV-15 MAN

Flow Characteristics	
Applications	Disinfection
Flow rate gpm (lpm)	15 (57)
Dosage	30 mJ
Vessel Overview	
Vessel	304 L stainless steel
Treatment	Electropolished
Pressure rating	100 psi (6.9 bar)
Mounting	Horizontal/Vertical
Connections	3/4" or 1" MNPT
Lamps	1
System nominal watts	<50
Lamp type	Low pressure standard output
Wavelength	254 nm
Lamp life	> 1 year
Quartz cleaning	Manual cleaning device
Compression fitting	Aluminum anodized
Oring	Viton
Removal space lamps	36"
Power Supply Center	
Type	Remote UL Ballast Control Center
Power	120-277 Volt 50/60 Hz
Ballast type	Electronic
Alarm (Visual)	Green LED - Lamp operating Red LED - Lamp Failure
Alarm (Audible)	Continual Beep for Lamp Failure
Lamp life status	Running time in days Lamp change reminder with a 365 day countdown. At replacement time, unit will "chirp". The lamp change reminder can be silenced for 7 days and can be repeated up to 4 times
Power supply	3' from Chamber to BCC 5' from BCC to outlet
Options	
Ultraviolet Monitor	Analog or Digital with 4-20 mA
Voltage	220 Volt 50/60 Hz

GUV C15



UV is effective on many

- Bacteria
- Viruses
- Fungi
- Algae
- Protozoa

Applications

- Disinfection

Microorganisms

- Cryptosporidium
- Giardia
- Cholera
- Salmonella
- e-Coli
- Coliform bacteria
- Fecal coliform

Water quality considerations

- Pre-filtering / treatment
- UV transmission >70%
- Iron < 0.3 ppm
- Turbidity < 1 NTU
- Hardness < 120 mg/l
- Manganese < 0.05 ppm

Origin of Manufacture

- Pressure vessel - USA
- UV lamp - USA
- Quartz sleeve - USA
- Ballast Controller - China