



# PROGRAMMABLE UV-C STERILIZATION UNIT

Developed by  
CSIR-Central Glass & Ceramic Research Institute

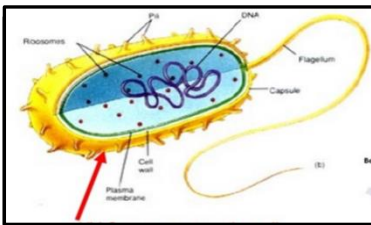


## Product Description

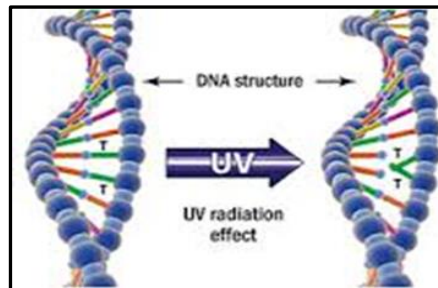
- Programmable UV-C Sterilization unit.
- Typical disinfecting time ~1-2 minutes.
- Designed with safety interlock features, like Safety switches, LED indicators, Buzzer etc, to protect users from UV-C radiation.
- Auto cut off, on/off buzzer
- Customized design can be provided.

## Major Applications:

Materials to be disinfected: Mobile phone, laptop, office files, papers, letters & parcels, cash, cheques, tools, etc.



UV-C energy enters the cell



## Cell Destruction Principle

When exposing microorganisms to UV-C light, the light penetrates through their cell wall and causes thymine bases in their DNA to bond and thereby creating a dimmer. If enough dimmers are created, they can't multiply.

## Specifications:

Input	230V, 50 Hz AC
Output	253.7 nm germicidal UV-C
UV-C source	4 X 15W tubes; Tube Rating: 54V, 0.34A. (Intensity of a single light is 47 $\mu\text{W}/\text{cm}^2$ at a distance of 1 metre)
Door	Designed with safety interlock features to protect users from UV-C radiation.
Inside effective chamber dimension	550 mm X 430mm X 330mm
Timer	Programmable digital display
View panel	AIS float glass for safe viewing



**The UV-C sterilization unit was inaugurated by Dr. K Muraleedharan, Director, CSIR-CGCRl on 23.06.2020 in presence of senior scientists of the Institute.**

The developmental job was undertaken under the leadership of Shri Ashim Kr. Chakraborty, Chief Scientist, Head-Material Characterization & Instrumentation Division (MCID) & Advisor (Management) and with the help of dedicated team members of MCID. The above machine was installed and commissioned at the main entrance of the Institute. In this crisis period of coronavirus pandemic situation, this equipment will be useful for disinfecting many essential items of day to day uses in the institute. The successful development was made possible due to continuous inspiration and support from Dr. K. Muraleedharan, Director CSIR-CGCRl.