



# ULTRAVIOLET GERMICIDAL IRRADIATION

## UVMAX SM14D – J SERIES



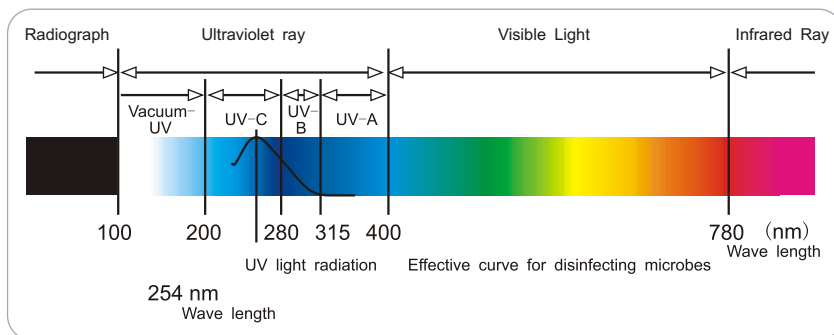
Ultraviolet germicidal irradiation (UVGI) is a disinfection method that uses short-wavelength ultraviolet (UV-C) light to kill or inactivate microorganisms by destroying nucleic acids and disrupting their DNA, leaving them unable to perform vital cellular functions. [UVGI is used in a variety of applications, such as food, air, and water purification.

UV-C light is weak at the Earth's surface as the ozone layer of the atmosphere blocks it. [UVGI devices can produce strong enough UV-C light in circulating air or water systems to make them inhospitable environments to microorganisms such as bacteria, viruses, moulds and other pathogens. UVGI can be coupled with a filtration system to sanitize air and water.

The application of UVGI to disinfection has been an accepted practice since the mid-20th century. It has been used primarily in medical sanitation and sterile work facilities. Increasingly it has been employed to sterilize drinking and wastewater, as the holding facilities are enclosed and can be circulated to ensure a higher exposure to the UV. In recent years UVGI has found renewed application in air sterilization.



### Electromagnetic wave drawing



### UV system information:

Material of the bulb: Quartz  
 Diameter of the bulb: T5/15mm  
 Intensity:  $85\mu\text{w}/\text{cm}^2$   
 Span Life Span: 9000 hours