

What should you pay attention to when purchasing UV disinfection equipment?

1. Before purchasing UV disinfection equipment, you need to understand the following basic knowledge of disinfection

- (1) Wet (chemical) disinfection:
 - A single-targeted disinfection method for killing bacteria and viruses.
 - Chemicals (including alcohol) need sufficient concentration, spray area, film thickness, contact time, and friction to kill pathogenic microorganisms.
 - Spraying alcohol in the air has almost zero effect on eliminating bacteria and viruses.
- (2) Dry (ultraviolet) disinfection:
 - The evaluation of ultraviolet disinfection equipment focuses on illuminant intensity, irradiation area, and volume.
 - Only through ultraviolet irradiation and air purification can realize actual disinfection.

2. What are your disinfection objects?

- (1) Bacteria / Virus / Bacterial Spore / Fungal Spore
- (2) PM2.5 / Dust / Allergens

3. What is the expected disinfection effect you require?

- (1) Sterilization: the most stringent requirement, all microorganisms must eliminate to achieve an utterly sterile state
- (2) Bactericidal: it can kill microorganisms so that they cannot grow and reproduce
- (3) Bacteriostatic: inhibits the growth and reproduction of microorganisms and will resume growth and reproduction once it stops
- (4) Disinfection: eliminate most microorganisms, but not all of them
- (5) Sanitization: only reduce the number of most microorganisms to meet the minimum safety requirements

4. Has the UV disinfection equipment you evaluated been validated by the P4 highest level biological laboratory?

- (1) Is there a laboratory report with a qualified disinfection effect?
- (2) Do you have a complete verification report for COVID-19, MRSA, CDI, and other highly infectious bacteria/viruses?
- (3) Does the verification report show that bacteria/viruses no longer multiply and completely lose transmission ability after disinfection?

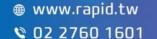
5. What's the photoelectric radiation power (ultraviolet disinfection intensity) of the illuminant of the disinfection equipment you evaluate?

- (1) Intense pulsed light: Rapid!xp Solis 1,530 W/m² (single light source); Rapid!xp Duplex 3,570 W/m² (dual light source)
- (2) LED UVC: 0.0008 W/m² (per piece)
- (3) UVC: 11.6 W/m² (per tube)











6. What conditions should you evaluate to achieve the complete disinfection effect of UV disinfection equipment?

- (1) (Surface or volume) \times irradiation intensity \times irradiation time
- (2) Surface disinfection calculates according to the area size; air disinfection calculates according to the volume size.
- (3) Set up a sufficient amount of disinfection equipment for surface/volume disinfection
- (4) Adequate exposure time for surface/volume disinfection

7. You must also consider the following vital points when evaluating UV disinfection equipment.

- (1) Does it provide the correct disinfection method and 365-day fully automated operation?
- (2) Are there safety protection measures and electrical safety certification?
- (3) Estimate the cost of consumables and long-term use cost



