Standalone UV Air Disinfection System for Rooms and Spaces

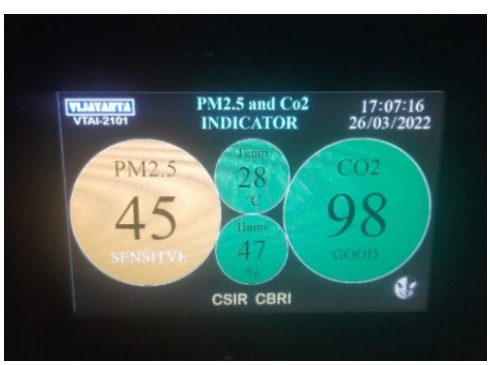
Technology in Brief

A novel UV-C Type Portable Air Purification and Disinfectant System is developed for indoor applications. It is designed keeping in view the Covid-19 pandemic with enhanced retention time and UV dosage and thus significantly improving the virucidal efficiency. The device is designed in close collaboration with CSIR-CSIO and CSIR-IMTECH. The virucidal efficiency of the system is more than 99.9%. It is very effective in preventing indoor pollution for places affected with very poor AQI rating.

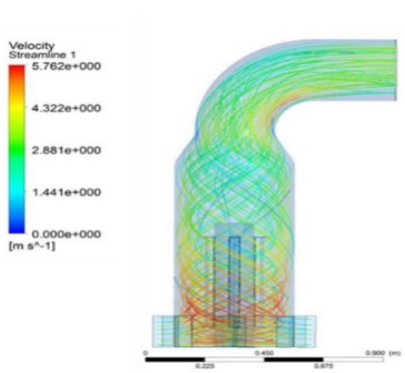
Salient Features/Advantages

- A novel baffles design to prevent UV leakage.
- A novel fan mounting system to deliver unidirectional or multi-directional air.
- Easy to install, operate and maintain, and with improved safety and control.
- Single system for prevention of viral disease transmission and prevention of indoor air Pollution.
- Large coverage area due to novel design and high flow capacity.
- Applicable for all types of buildings in places having poor AQI rating.

Air Disinfection System



Monitoring Indoor Pollutants



CFD Simulation of Air Flow

End Product(s)	Air Disinfection and Purification System
License/Commercialization	M/s Rapid Controls Pvt. Ltd., New Delhi
TRL	7
Setup - Equipment required	Assembling Work and Sheet Metal Work (Raw Materials: 254nm UVC Lights, Axial Fan, Electrical and Electronic Components, HEPA Filter Media, etc)
Employment generation	Targeted towards MSME Sector
Linkedin Video Link	https://www.linkedin.com/posts/csircbri_cbri-csir-indoorairquality-activity-7404477634455355393-SB1y?utm_source=share&utm_medium=member_desktop&rcm=ACoAAE1ijyABshTzQUwK7Dj8mksi4yko5dgW6LA
Youtube Video Link	https://www.youtube.com/watch?v=BsL_OdLrOoE