



## UVBot - Mobile Room Sterilizer



Since the last few years, mobile system based UV-C radiation have been used for cleaning and disinfecting hospitals in the Western World and this has reduced the incidences of hospital acquired infections. In India, these machines need to be imported and the cost was a prohibitive limiting factor. To overcome this shortcoming we have developed a UVC Bot which has been applied for patenting.

The contribution of this equipment to the conditioning of hospital areas makes these systems useful for other kinds of spaces that require periodical disinfecting namely the hospitality sector and pharma manufacturing units. The pathogen inactivation by UVC is predominantly based on UV absorption by nucleic acids (DNA and RNA) causing DNA damage by producing cyclobutane pyrimidine dimers and thus interfering with DNA replication.

The Invitreo Mobile Room UVC Germicidal Infection Control Solution was developed with the Make in India initiative in mind; was designed with the goal of Indian population achieving zero infections from hospitals, it is very affordable and more effective than any other currently available mobile room germicidal UVC device marketplace.

Since no UVC robot at this time can clean up soils and liquids; this needs to be done manually, as well, if there were an object left on top of a table, what's underneath would not get disinfected by the ultraviolet light. Hence we recommend using our automated room sanitizing technology, as the final step during terminal cleaning of patient rooms or OT, or in any other area where harmful pathogens may be present.

Our UV-C apparatus is controlled by an Android mobile device using Wi-Fi to connect to the mobile device, which in turn controls the UVC and hence remotely operated. Clinical validations indicate that disinfection efficiency is good up to a distance of ten feet on either side of the tube and an exposure time of 15 minutes is adequate.

#### **Our Bot is effective even against:**

- Methicillin resistant Staphylococcus aureus (MRSA)
- Clostridium difficile – spore forming bacteria
- Vancomycin resistant enterococcus (VRE)
- Gram negative bacteria
- Influenza virus
- Dengue virus
- Other bacteria, virus



#### **Mobile UV Room Sterilizer Technical Specs**

- Input Voltage: 240 VAC, 50 Hz, 15 Amps
- Internal Fuse Rating: 10 Amps, spares also provided
- Power Cable Length: 20 feet
- Weight: approximately 200 kgs.
- Lamp Length: 4 feet
- Lamp Quantity: 20
- Remote Control: Phone will act as the remote
- Protective Transport Cover
- Device Activation: Manual or Remote Controlled
- Safety Features: 360° Motion Sensor
- Base: 640 x 840 mm

## **Unique features of our bot are:**

### **1. Affordable**

- Most affordable mobile room germicidal UVC device
- Easy to move and easy to use
- Features high-output UVC doses
- Delivers uniform UVC dose

### **2. Disinfects even shadow areas**

- Our Bot is strong enough that the light essentially bounces off other surfaces and reaches into shadow areas and sterilizes them.

### **3. Long lasting**

- The bulbs on our device will last up to 10,000 hours of usage time! In a day more than 60 rooms can be sterilised each up to 15 minutes.

### **4. Protective cover for uv bulbs**

- To prevent damage to the bulbs during transfers between rooms and during transportation, we've used enclosed covering for the bulbs which will open only when the bot is ready for sterilising the room.

### **5. Safe**

- 360° motion sensor - automatically shuts off if people enter the room during disinfection

### **6. User-friendly**

- No significant special training required
- Easily operated by anyone after preliminary training
- No special room preparation required, as device is strategically placed inside treatment room

## 7. **Green Technology**

- No special lamp recycling required
- No additional chemicals necessary
- No waste is generated
- Deodorises the room

## 8. **Downloadable Data – Available only in Higher End Models**

- Automatic document control helps reduce or eliminate human error during data collection
- Wirelessly downloads acquired session data to a computer
- Measures number of rooms and exposure time will be logged

**For more information or for enquiries contact:**



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