



# UV-C JUGNU

Smart Robot for UV Disinfection

UV disinfection trolley can effectively clean up hospital spaces to combat COVID-19 – **Department of Science and technology, Govt of India.**

The UV-C irradiation with peak intensity at 254 nm has been a proven technology for disinfecting air, water and instruments for over a century.

UV-C JUGNU – The mobile ROBOT from JanyuTech - National Innovation Award winning Robotic Company, is powered by UV-C lamps from

Aeropure - ONLY Indian manufacturer of High Output UV-C Quartz lamps for the last 20 years.

☒ STERILIZATION

☒ DISINFECTION

☒ NO CHEMICALS



UV-C JUGNU is a remotely operated mobile robot, fitted with UV Disinfection Lamping system(254 nm).

**Key Features:**

*360 degree UV-C illumination*

*360 degree Safety Sensors with multilayer safety*

*Robot Speed:*

*Nominal speed: Upto 1 meter/sec*

*Disinfection speed: 5-10 centimeters/sec*

*Remote operations from Windows/Android controllers*

*In-built Wifi*

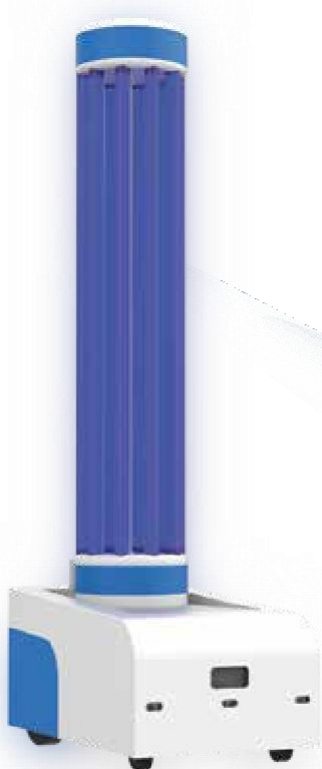
*Cameras and Collision avoidance systems for*

*Advanced User Assistance*

*Cloud based Data logging and Disinfection analytics for Premium usage*

*Optional Battery and Cabled versions*

UV-C JUGNU has a WiFi connected with a camera to get live Audio-Visuals of the path to the control station and interact along with the travel, announcing various messages. The Robot has a power selection option to increase the intensity of the UV system. Obstruction sensing is provided at the front and back for effective driving.



## UV-C JUGNU : UltraBlaster

This is a Remotely operated robot fitted with UV-C Disinfection Lamping system with Inbuilt Batteries, “UV-C JUGNU : UltraBlaster” is ideal for disinfection of larger areas, factories/shop floors, and public places.

Dimensions: 85 cms \* 50 cms \* 1800 cms

Weight: 85 kgs

UV-C Wattage : 768 Watts

Interactive Touch Screen & Joystick based operator controller

Power:

Battery Endurance: upto 120 mins on continuous UV-C operation

Rechargeable Lithium Ion Batteries.

Swappable Spare batteries for continuous operation.

## UV-C JUGNU - SuperBlaster :

This is a Remotely operated robot fitted with UV Disinfection Lamping system. With a 30 metre long cable, these are ideal for office spaces, households, commercial complexes.

Dimensions: 45 cms \* 45 cms \* 1200 cms

Weight: 25 kgs

UV-C Wattage : 450 Watts

Interactive Touch Screen & Joystick based operator controller / Mobile phone based application

Power:

230 V 50 Hz AC

Cable Tether: upto 30 metres



# UV-C Fact Sheet

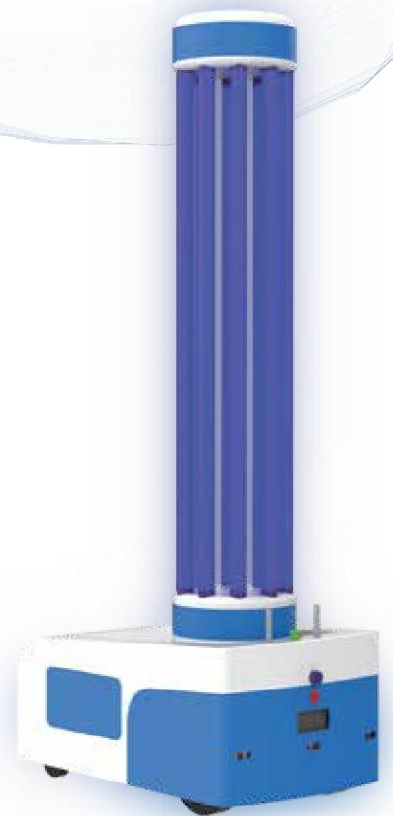
The dosage required for disinfecting COVID-19 virus (SARS-CoV-2) and comparable viruses in the same SARS virus family around 10-20 mJ/cm<sup>2</sup>.

Using direct UVC light at a wavelength of 254nm; this dosage will achieve 99.9% disinfection (i.e., inactivation) under controlled lab conditions.

In real life conditions, this can be considered to achieve 90% disinfection.

UV dosage :  $\mu\text{W sec} / \text{sq.cm.} = \mu\text{W intensity per sq.cm} \times \text{time exposed in sec}$

#Experimentally Validated Data	UV-C JUGNU: 768/B:UltraBlaster	UV-C JUGNU: 450/C:SuperBlaster
Shatter Proof, Weather proof, High Output Quartz UV-C 254 nm Lamps with 10,000 hrs life		
UV-C254 nm Lamp Wattage / Lamp	96 Watts	75 Watts
Number of Lamps	8	6
Total UV-C Wattage / system	768 Watts	450 Watts
Exposure Time for Log0(90%) disinfection : 22.6 mJ/cm <sup>2</sup> (for 150 sqL area)	90-100 seconds	170-180 seconds
Exposure Time for Log1(99%) disinfection : 45.2 mJ/cm <sup>2</sup> (for 150 sqL area)	190-200 seconds	350-360 seconds
User Operation	User Console with interactive Windows/ Android Application	User Console with interactive Windows/ Android Application
Robot Operation Safety	a. Remote operating range of >20 metres b. 360 degree sensors for human/pet safety c. Audio & Visual Safety Alarm d. 2 Level Authorization & Security to operate machine and UV lamp	a. Remote operating range of >10 metres b. 360 degree sensors for human/pet safety c. Audio & Visual Safety Alarm d. 2 Level Authorization & Security to operate machine and UV lamp



# Superior UV- C lamps

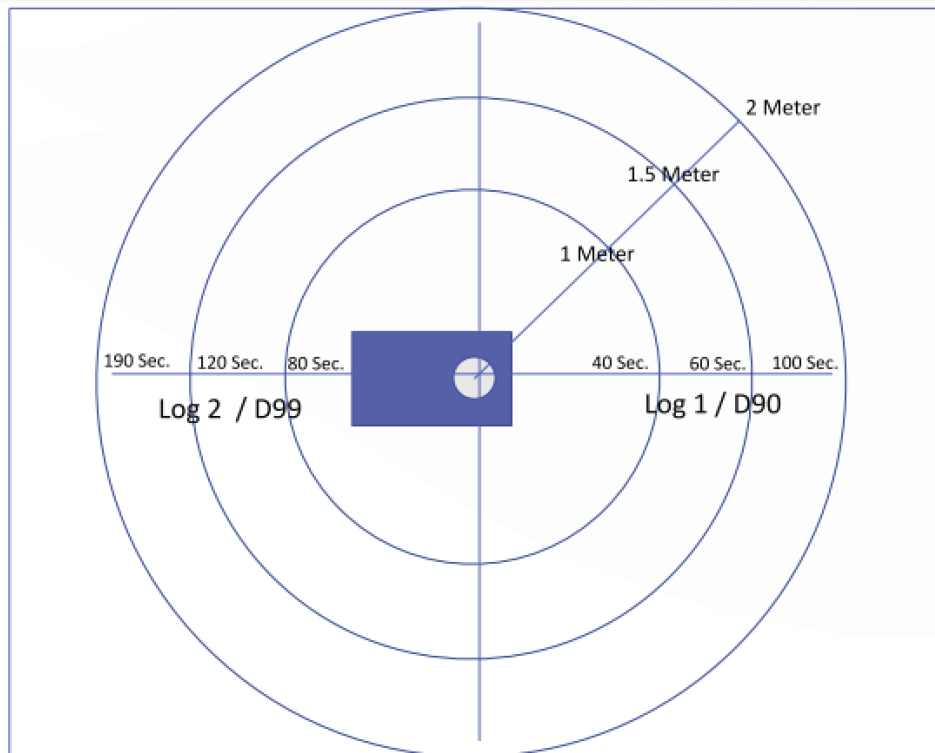
Our AEROPURE UV Lamps are 100% indigenously made.

Instant start, Low –pressure mercury filled lamps made out of Quartz glass.

Our UVGI Systems are Green “GreenPro” Certified System by IGBC.

Our UV lamps are shatter-proof, even if the lamp breaks for any reason the glass pieces are not spilled over because of the specially designed shatter-proof construction.

Cheaper UV lamps made of SoL glass are weaker and give very less UV transmittance compared to our Quartz lamps



UV-C JUGNU Ultra Blaster Disinfection Performance Data

## JANYU TECHNOLOGIES PVT LTD

No.17, Building No.6 , Raj Prbha Industrial Estate  
Bhoidapada , Behind TATA motors Show Room..  
VASAi East 401208 , Palghar Dist.,  
Maharashtra,  
Email [sales@janyutech.com](mailto:sales@janyutech.com).