# UVD ROBOTS

## OUT OF THE BOX SOLUTION

ROBOTS

WWW.UVD-ROBOTS.COM



### UV Disinfection solution increases **patient safety**

#### 3<sup>RD</sup> GENERATION AUTONOMOUS UV-C DISINFECTION

Hospital Acquired Infections are a significant and increasing problem in the global healthcare sector. Each year millions of patients are infected and thousands of patients die due to infections acquired during hospitalisation. Furthermore, HAIs generate a massive financial burden.

#### **REVOLUTIONIZING INFECTION PREVENTION**

The UVD Robot<sup>®</sup> Model C has been designed based on feedback from infection prevention specialists to be part of a regular cleaning routine, and aims at reducing the spread of infectious diseases, bacteria, and other types of harmful organic micro-organisms and pathogens in the environment. Our agile 3<sup>rd</sup> generation robot has several new features, that raises to a higher level of infection prevention.

Our UVD Robot<sup>®</sup> disinfects small and large areas simply just by driving by. Depending on the exposure time, The UVD Robot can kill up to **99.99%** of pathogens such as covid-19. It disinfects all kinds of surfaces, which contains thousands of different bacteria, but also it can significantly reduce the bacterial count in the air.



#### THE UVD ROBOT®

- A fully autonomous mobile platform emitting concentrated UV-C light onto high, medium and low touch surfaces in support of normal cleaning routines
- Prevents and reduces the spread of infectious microorganisms in the environment
- Safe, reliable and user friendly operation by hospital cleaning staff
- Reduces hospital acquired infection rates and associated costs

#### WHY ARE UVD ROBOTS MORE EFFECTIVE AGAINST SARS-COV-2?

The germicidal characteristics of UV-C light at close range are well known. However, the laws of physics governing distance to surface and shadow, present a challenge to the feasibility of using UV-C light as a disinfectant in larger areas. These include small and large areas at hospitals, nursing homes, rehabilitation centers, etc. The agility and autonomy of the UVD Robot<sup>®</sup> overcome these challenges, and the UVD Robot is the only fast and efficient solution to large area disinfection.



As the robot drives by it delivers approximately 70mJ/cm<sup>2</sup> of UV-C

3 x the dose required

to reduce SARS-CoV-2

by 99.9999%



In June 2020, the company supplying the UV-C lamps mounted on the UVD robot commissioned clinical trials to test the efficacy of their lamps against SARS-CoV-2.

The test was carried out at The National Emerging Infectious Diseases Laboratories (NEIDL) at Boston University in the US with the university concluding that a dose of  $22mJ / cm^2$  would reduce the virus by 99.9999%.

It will save lives, it will reduce waiting lists, it will reduce hospital-acquired infections.



**DR. BRUCE MAZER** Interim Executive Director and Acting Chief Scientific Officer of the Research Institute

#### **KEY BENEFITS**

Autonomous mobile solution Fast and efficient disinfection process Standard process without manual labour Easy to install and use

#### UVD ROBOT MODEL C



DIMENSIONS: L: 75 x W: 55 x H: 178 (cm)

#### **TECHNICAL SPECIFICATIONS**

- TOTAL WEIGHT.....120 kg
- OPERATING TIME...... 2 hours (disinfects up to 12,000 m<sup>2</sup>)
- BATTERY CHARGING TIME ...... 5 hours
- DISINFECTION COVERAGE......360 degrees
- DISINFECTION TIME......10 min Regular patient room incl. a toilet 25m<sup>2</sup> 30 min - Large area - 500 m<sup>2</sup>
- CONNECTIVITY...... Wireless (Wi-Fi based)
- MAX SPEED.....2.7 km/h
- UV-C WAVELENGTH..... 254 nm (Ozone free)
- UV-C LAMP LIFESPAN.....12,000 hours of disinfection
- CHARGING REQUIREMENTS....220-240 VAC, 50 Hz, 6 Amps
- SAFETY......Software & Sensors Based Emergency Stop Button



VAL EDWARDS JONES EMERITUS PROFESSOR OF MEDICAL MICROBIOLOGY

C The UVD Robot from Denmark is most impressive because of its ability to move autonomously and get within 1m of the surface to be disinfected and also it is capable of moving around objects that can potentially cause shadowing ...



#### PAUL CLARKE HEAD OF FACILITIES MANAGEMENT SERVICES AT ONE OF UK'S LARGEST NATIONAL HEALTH BOARDS

CF For me, UVD robots should be one of the seven cleaning wonders of the world. UV technology is fantastic. I think UVD robots are amazing. The UVD robot will revolutionise preventative cleaning 22



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The UVD Robot® is highly effective in the inactivation of harmful microorganisms and it is deployed by hospitals all over the world to protect vulnerable patients from hospital acquired infections. The clinical efficacy of the UVD Robot has been independently tested and validated at the following institutes





