

# NIGHTINGALE

Ultraviolet Germicidal Disinfection Robot



September 2020 Product Sheet

Health Through Innovation

## NIGHTINGALE

A unique product employing the latest germicidal ultraviolet technology coupled with innovative robotics.

Disinfection of enclosed areas such as Airports, Hotels, Health care buildings, Offices, Warehouses and much more.

### Ultraviolet Light for Disinfection

Traditional cleaning methods are labor intensive and normally use chemicals, Ultraviolet light leaves no residue on surfaces and completes a disinfection in minutes.

Ultraviolet light has been employed in the health sector for disinfection of operating theaters for many years, also it has been used globally for water purification.

But not all Ultraviolet lights are the same, sun tanning tubes for example operate at a different wavelength and do not afford germicidal properties, only ultraviolet light in the short wave(254nm) has germicidal properties.

### Viruses and Pathogens

Ultraviolet-C attacks the DNA and RNA bonds of all viruses, bacteria, mold, etc. To date there is no known pathogen or bacteria that are resilient to germicidal UV-C. effective against influenza A, MERS, Covid SARS, E. coli and many more.

### Industry-Leading Features

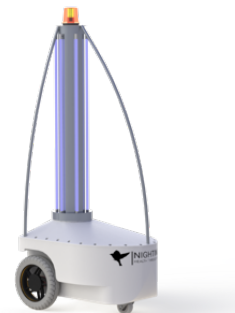
The NIGHTINGALE maps a room and then proceeds to disinfect the area in the most efficient way, ensuring maximum coverage, an average office space can be disinfected in a matter of minutes.

In the same way that Ultraviolet light is dangerous to viruses and bacteria it can also be harmful to humans, hence our robotic platform removes this risk, complete with human detection algorithms the system initiates a shutdown on detection of a human during the disinfection cycles.



## SYSTEM FEATURES

- Battery operated.
- Autonomous and remote control.
- Safety shutdown on detection of human presence.
- Uses non ozone generating lamps.
- Room mapping feature inbuilt.
- Generates report logs.
- Health and Usage Monitoring.



*Subject to change without notice.*

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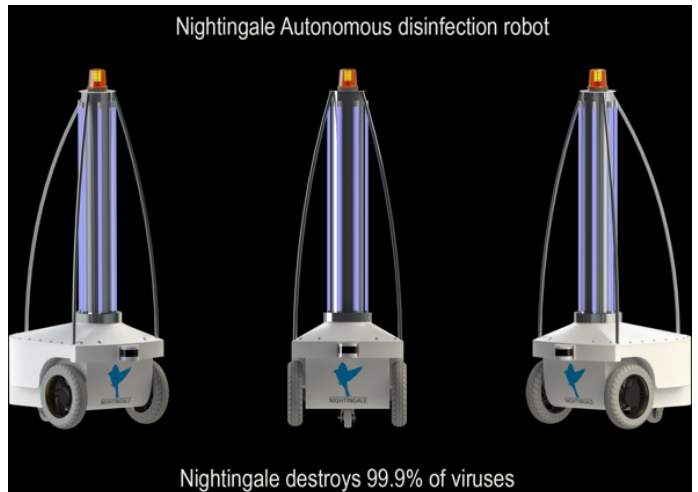
Ultraviolet Germicidal Disinfection Robot



CHARACTERISTICS		
Power	24v dc	
Battery	100Ah	Lithium Ion with smart balance
UV-C lamps	8	Low pressure mercury germicidal
Wattage	512w	Combined power of all lamps
Fluence rate at 1m	5300mJ/cm2 @10 seconds	Measured from center of one lamp at 1m
Charge time	2-3 hours	
Operational duration	3-5 hours	
Disinfection time *typical	Approx. 14 minutes for 100m2 area	*Times will vary with room size and complexity
Control	Tablet based software.	Autonomous and remote control
UV-C safety shutdown	Fitted	Camera and algorithm
Emergency stop	Physical stop button	Software defined stop button
Hazard Beacon	Fitted	Standard orange
Obstacle detection	Fitted	Lidar

WEIGHT & MEASURES	
Weight	87kgs
Length	900mm
Height / Width base unit	610mm
UV-C Tower (SO)	1060mm
UV-C Tower (HO)	1900mm

OPTIONAL EXTRAS	
NG-UVC-254-PB	UV-C Test meter
NG-UVC-QC	Quartz lamp cover
NG-UVC-SO (Default supply)	STD output tower
NG-UVC-HO	HIGH output tower



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