

# UVC Disinfection Robot Product Manual



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# 01 PRODUCT OVERVIEW

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Replacing Manual,Auto Charging,  
Obstacle avoidance and timing tasks,  
Truly achieve 7\*24 hours of self-management,  
Ensure excellent disinfection effect.

# INTRODUCTION

## 01 Product Profile

### Multi-scene application

Suitable for biosafety, laboratories, hospitals, airports, airplane, hotels, KTV, scientific research institutes, dust-free workshops, schools, food enterprises and other places need disinfection with regular elimination.

### High power disinfection



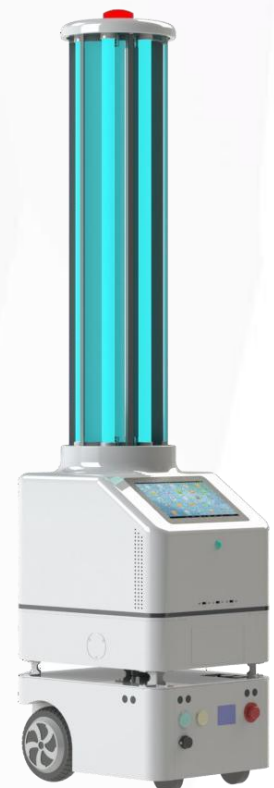
High power disinfection, strong damage to the DNA, RNA of bacteria, disinfection for 90 sqm space could be done in 10 minutes by ultraviolet technology, the disinfection efficiency can be 99.99%.

### High precision navigation

VSLAM and Laser SLAM are flexibly matched and stable, the width of the machine is only 38cm, high precision autonomous obstacle avoidance and navigation ability, and it is easy to carry out autonomous disinfection task in many complex scenarios.

### 7\*24 hours Self-management

7\*24 hours Self-management of automatic charging and disinfection work 24 hours, no need manual aside for disinfection and charging.



# 02 Product Details

## PRODUCT DETAILED INFORMATION

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High-intensity fixed-point disinfection not only has a wide range, but also can effectively and thoroughly eliminate bacteria

# MAIN FUCTION

## 02 Product Details



- Intelligent obstacle avoidance
- Autonomous navigation
- Automatic charging
- Timed disinfection

- Statistics
- Support networking
- High energy disinfection
- Voice alert

- Disinfect immediately
- multi-lingual
- Disinfection record
- Depletion Reminder



### **360-degree coverage and disinfection**

The robot is equipped with ultraviolet light tubes, and 360-degree coverage and disinfection. Has a good sterilization effect.



### **Large area mapping**

It supports a mapping scene up to 8000 square meters, regardless of the size of the scene can easily cover the disinfection work.



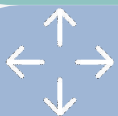
### **Autonomous charging system**

The robot has an autonomous charging function, which can ensure sufficient power at any time to ensure completion of the disinfection task



### **High power disinfection**

The ultraviolet lamp tube covers all directions, the cumulative ultraviolet radiation intensity is 600uw/cm<sup>2</sup>, and the coverage radius is 6-8 meters



### **Autonomous moving obstacle avoidance**

The disinfection robot has autonomous navigation technology and autonomous movement, can identify objects in the environment, and achieve autonomous obstacle avoidance.

## **Quantitative management of disinfection process**

The robot operates intelligently throughout the whole process, and the man-machine is separated to ensure the safety of personnel.

## **Scheduled disinfection tasks**

Users can schedule disinfection tasks to achieve regular cycles without the need for manpower to share more management and disinfection tasks.

## **Immediate disinfection task**

Under special circumstances, the user can operate the UV disinfection robot to perform immediate disinfection tasks.

## **Human body induction countdown protection mechanism**

During the start of the disinfection task, preparations for the countdown will be carried out, and the disinfection work will be carried out only after the countdown is completed when no one is in the sensing environment.

## **Human body induction disinfection protection mechanism**

During the disinfection process, if a person is detected, the disinfection work will be stopped immediately and the countdown alarm mechanism will be entered





### Disinfection record

The user can view the disinfection record on the robot, so that the user can know the working condition of the robot and easily manage the disinfection work.



### Disinfection statistics

The statistics of disinfection data show the cumulative duration of disinfection, the number of times of disinfection, the disinfection data of ultraviolet light tubes, etc., so that users can know the status of the disinfection robot.



### Optional disinfection path

Support custom selection of disinfection points, providing users with more convenient disinfection options.



### Support 4G network update

The disinfection robot supports the insertion of a SIM card to connect to the Internet, and in addition to synchronously updating data and disinfection records, it can also achieve network updates such as software and



### Voice alert

During the execution of the disinfection task, for on-site safety considerations, a voice warning will be issued to inform the user of the current situation of the robot.

# 03 DISINFECTION WORK FLOW

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Smart interaction with simple operation  
can truly achieve efficiency

# WORK FLOW

## 03 Disinfection Work Flow

1



The user arranges the disinfection schedule on the robot

2



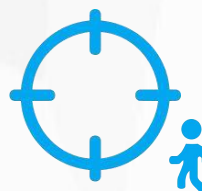
The robot automatically starts the task according to the schedule

3



Reach the required disinfection position

4



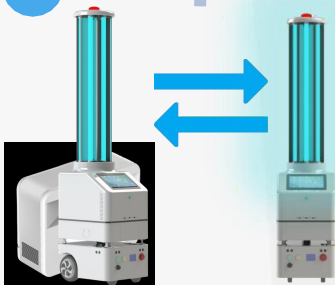
The robot enters the disinfection and starts the countdown mechanism and monitors whether there are people

5



The robot starts to disinfect

6



Robot autonomously manages disinfection and charging work

7



Users check the disinfection record to check the disinfection situation

### DISINFECTATION WORK FLOW

# 04 PRODUCT SEPC.

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# PRODUCT SPEC

04  
Product Spec.

## Overall size

460 X 380 X 1722 mm

## Upper system parameters

Component	specification	
CPU	RK3288, 32-bit, quad-core ARM-A17, 1.8GHz	
GPU	Mali-T764	
DDR	DDR 2GB	
Flash	EMMC 8G	
Android	Android 7.1.2	
Display touch screen	Display screen	LED screen, TFT-LCD
	Size	10.1 inch, 16:10
	Resolution	1920*1200
	brightness	≥250cd/m
	Contrast	≥ 800:1
	Viewing angle	178°
	Touch technology	Capacitive touch screen
	Response time	<5ms
	Touch points	10-point touch
	Surface hardness	Tempered Morse Class 6 Explosion-proof Glass
WiFi	802.11b/g/n	
Bluetooth	4.0	
RTC Real Time Clock	Support	
speaker	3W	
USB interface	USB、OTG	

## Sterilization parameters

Component	specification
Ultraviolet radiation Range	360°
Number of UV lamps	6 tubes
UV power	330W
Irradiance at 1 meter	600uW/cm <sup>2</sup>
Sterilization speed	90sqm/10minutes
Single point sterilization radius	6-10ms

## Control system parameters

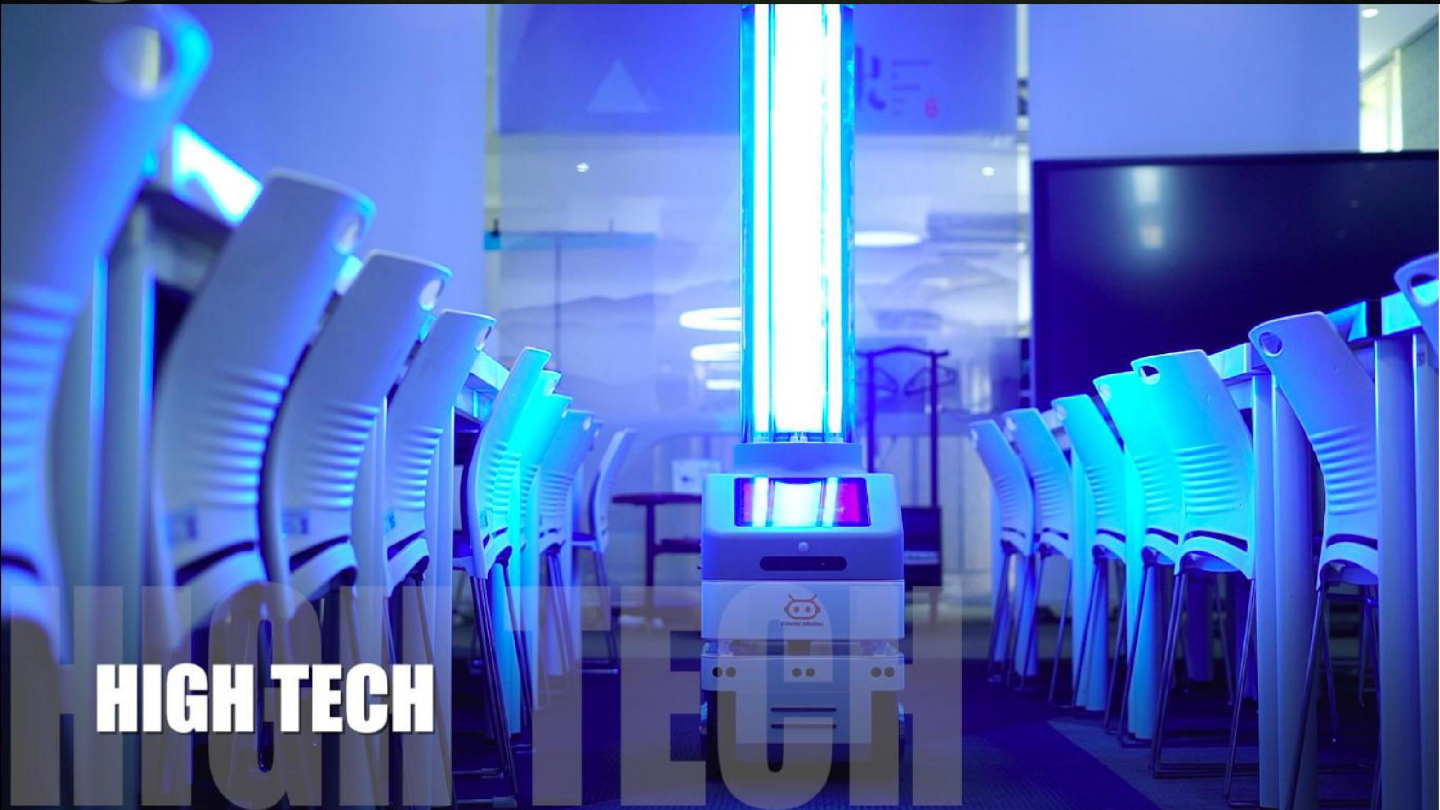
Component	specification
Lidar	270°, 10m
Accelerometer	Support
Ultrasound	7 Groups
Depth camera	effective distance 6m
Human body induction	Front and back, cone angle 140°
Drive way	2 front wheel drive + 2 rear guide wheels
Maximum span width	3cm
Maximum walking speed	1.2m/s
Navigation walking speed	0.6m/s
No-load braking distance	28cm
positioning accuracy	±5cm
Maximum mechanical working time	15h
Maximum electronic working time	2h
Type of battery	lithium battery
Battery capacity	45Ah
Charging method	automatic / manual
Charging time	adapter: 2h (10%-80%)
	Charging pile: 2.5h (10%-80%)
Power connector	29.4V

## Operation requirements

Component	specification
Operating temperature	-10°C~45°C
Relative humidity	≤80RH
Transportation storage temperature	-20°C~70°C
Transportation storage humidity	≤90RH, No condensation



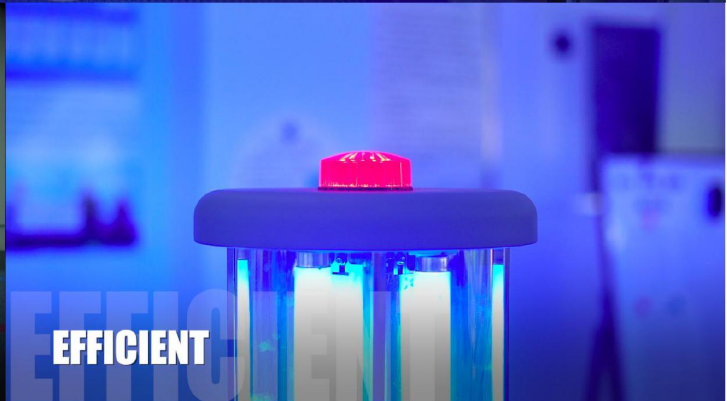
**SAFETY**



**HIGH TECH**



**STABLE**



**EFFICIENT**



## Laser servo

The robot can accurately dock the charging pile.



## High power disinfection

Can achieve 99.99% killing effect against multi-drug resistant bacteria



FUTURE



INTELLIGENT





—  
**THANKS!**