UVitron

UV-C FULLY-AUTONOMOUS DISINFECTION ROBOT

User Friendly   Reliable   Smart

VERIFIED
ALL OUR DISINFECTION DEVICES HAVE BEEN TESTED AND APPROVED TO DESTROY
%99.99 OF PATHOGENES
VERIFIED

www.etkintibbi.com

Company Profile

Etkin Tıbbi Cihazlar was established in 1996 as a medical device sales and service company. Since its establishment, Etkin Tıbbi Cihazlar has adopted high quality and trustworthy customer service as the company's main philosophy.

Etkin Tıbbi Cihazlar started manufacturing and sales of the LED surgical lighting systems in 2012 and has become one of the renowned brands in the world.

In the Turkish market the company is a medical device importer and seller as well, and it performs in the areas of intensive care room equipment, operating room equipment supplies, radiology devices, anesthesia, surgery, gynecology, pediatrics and sterilization. Etkin Tıbbi Cihazlar is a proud provider of high quality and trustworthy customer service and technical support for the health care institutions, with an expertise in serving the operating rooms and ICU rooms. Currently LED surgical light products constitute the sole international business product line for exports. Now In 2023, Etkin Tıbbi Cihazlar proudly presents the UV-C disinfection device, **UVitron**, equipped with the latest technology.

About UV-C Fully-Autonomous Disinfection Robot

UVitron

UVitron is an autonomous, smart, reliable and user friendly UV-C Disinfection Robot. It is designed to prevent the spread of Hospital Acquired Infections (HAIs), infectious diseases, viruses, bacteria.

Fully Autonomous & Smart

The fully autonomous driving system means that the operator easily can call UVitron via phone, tablet or PC and select the rooms which the operator is going to disinfect and press start button. It navigates to the desired position after the hospital cleaning personel is done the initial cleaning. After disinfection process finished, UVitron sends information to the operator that the process had been end. Thus, the UVitron would be ready for the new disinfection order.

Reliable

UVitron disinfects small and large areas simply depending on the exposure time. It has been tested and approved in an accredited laboratory that **UVitron** is up to 99.99% effective on pathogens.

UVitron is highly effective against most type of viruses and bacteria. When it is used correctly, can disinfect all environments that are potentially harboring dangerous microorganisms. UVitron has been tested and approved in an accredited Laboratory where it does not produce ozone gas.

Effective aganist viruses, bacteria and mold

OZONE FREE

Workflow

2
Operator selects the rooms and press the start button.

4
When the disinfection process is finished, the robot returns to it's charging station.

1
Operator fills required check list for the security from android device.

3
The robot disinfects the selected rooms.

5
At the end of the disinfection, it informs the operator that the process is accomplished.

Smart & User Friendly

1- When UVitron's charging status decreases to the critical level, it goes to the charging station and then repeats the cleaning of the room it left unfinished.

2- In case of someone enters to the disinfection area during the process the UV-C lamps are turned off automatically by the robot. At the same time, UVitron turns on warning light and activates the audible warning for the protection.

Thanks to intelligent software and superior sensor technology, UVitron detects obstacles, cliff and living creatures.

UV-C Fully-Autonomous Disinfection Robot Features

UVitron

Working Principle
100% Autonomus

Effect Rate
Inactivates 99.99% of Pathogens

Max Speed
0.5 m/s

Total Weight
125 kg

Dimensions
L:74 W:65 H:186 cm

Battery Type
LiFePO4

Indoor Navigation

Battery Charging Time
6 hours- Autonomous

Disinfection Time
3 hours disinfects 10-12 rooms

Operating Time
8 hours on full charge

Wavelength
254 nm (UV-C)

UV Disinfection Coverage
360°

Connectivity
Wireless (Wi-Fi based)

Control
Android devices,LCD Control Panel on the Robot

Monitorability and Traceability
Can Access Camera and watch all Process with Control Devices

Safety
Software & Sensor Based & Emergency Stop Button

Report
UVitron sends notification when disinfection is finished.

Height 186 cm

Width 65 cm

Length 74cm

Technical Data

Working principle	Full autonomous / Semi-autonomous / Manual	**Operating Time**	8 hours on full charge
Disinfection Level	Achieves a level of disinfection of %99.99	**Disinfection Time**	10-12 rooms in 3 hours
Robot Adjustable Speed	0.5 m/s	**Wavelength**	254 nm (UV-C)
Total Weight	125 kg	**UV Disinfection Coverage**	360°
Dimensions	L:74 W:65 H:186 (cm)	**Connectivity**	Wireless (Wi-Fi based)
Indoor Navigation	With smart sensors	**Control**	Android devices / LCD control panel on the robot
Battery Type	LiFePO4	**Monitorability and Traceability**	The operator has an access to reach the camera to watch all processes with control devices.
Battery Charging Time	6 hours	**Safety**	Sensor based • Human detection • Obstacle detection • Cliff detection Emergency stop button
Report	UVitron sends notification when disinfection is finished.	**Start**	UVitron use Android Devices or the Control Panel located on the Robot for the operator's orders

UVitron

Priority protection
system with checklist

Visual and audible
warning system

Auto rotating SDR system isused for increase the
UV-C dosage and protect the lamps from
external impacts, thus the system provides
maximum efficiency.

Auto-rotating SDR system 180°

Control panel

Emergency Button

Cliff
Sensors

Human Body Detection
Sensors 360°

Obstacle detection
Sensors

Safety

1- Priority protection system with checklist.

2- If a moving body is detected, the reflectors are turned off
and it warns visually and audibly that it is necessary to leave the
room, thus protecting them from the harm of UVC.

3- Avoiding instantaneous obstacles with obstacle sensors.

4- Preventing falling from gaps into cliff sensors.

5- Special Design Reflector (SDR) System increases the
disinfection efficiency of UVC lamps. The automatic rotation of
the reflectors protects the UV-C lamps from external factors.

6- Notification of the completion of disinfection with light and
audible warning. In addition, sending an information message
to the user.

Advantages

1- Increasing the UV dose rate with the SDR System when the robot is running.

2- In case the robot is not working expand life-span of the UV-C lamps by
protecting them from external impacts with it's SDR System.

3- Savings labor and operating costs.

4- Efficient disinfection process.

5- Prevents the spread of infectious microorganisms in the environment when
applied after manual cleaning performed by hospital cleaning staff.
Such as:

- Serratia marcescens, Staphylococcus epidermidis, Staphylococcus aureus,
  Bacillus subtilis,
- Cladosporium sphaerospermum, Aspergillus brasiliensis (Aspergillus niger)
- Adeno virus, Bakteriophage MS2, Vaccinia virus, Bovine Coronavirus

6- Smart, Reliable and User friendly.

7- Thanks to its autonomous structure, it provides disinfection for each
reachable surfaces.

8- Selectable disinfection direction/zone option (Right side, Left side or Full
360° disinfection).

UVitron robot, new vision of UVC autonomous disinfection

UVitron

UV-C FULLY-AUTONOMOUS DISINFECTION ROBOT

Etkin
TIBBİ CİHAZLAR

CE   kiwa gecertificeerd ISO 9001   kiwa certified ISO 13485   IQR ISO 14001:2015   IQR ISO 45001:2018   TSE