

Intelligent. Safe. MartinSystems fully automated disinfection robot.

AMR



Andreas is an autonomous mobile robot (AMR). He can be used in environments where people move and unexpected obstacles can occur. Andreas is equipped with UVC-light to combat viruses and bacteria. When the UVC-light is activated it is not allowed that there are any people or other beings in the close environment.

Navigation



Due to the intelligent navigation and motion control and a software which ensures an automatic map generation and orientation, the mobile robot navigates autonomous and safe inside a defined working area.

There are no modifications required to the building or the infrastructure.

Visualization

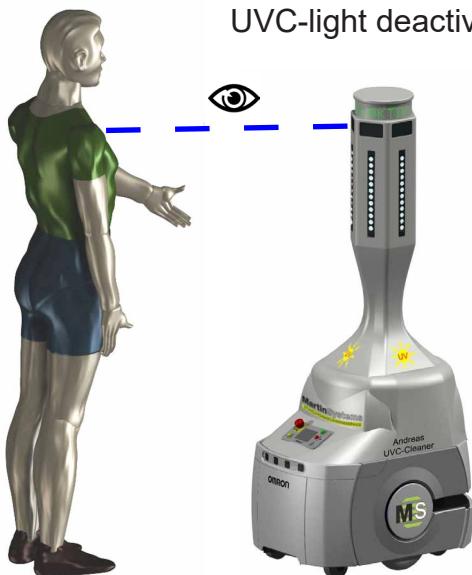
NEW



Andreas keeps his environment informed about the current working status with an all round running text. The working progress can be displayed on a tablet.

Option person recognition: If Andreas recognizes with activated UVC-light any movements in his environment, he will immediately deactivate the UVC-light. After no-movement for 30 seconds the cleaning process is continued.

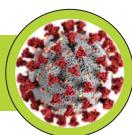
UVC-light deactivated



UVC-light activated



Disinfection



The characteristics of UVC-light are "short-wave light" and "high energy potential". The UVC-Cleaner is surrounded by six UVC-LED's.

Due to the emitted radiation the DNA of viruses and bacteria is destroyed reliably.

To combat the corona-virus the UVC-radiation is an effective and successful disinfection as well.

Fleet management



A special software assumes traffic control, job distribution and the control of robots. Also cleaning sequences and priorities can be defined.

The intelligent software distributes the available robots and compares the orientation of the AMRs regarding to the required driving distance to the place of destination.

Application



Wide range of application. Beside the use in public areas and other often used areas as airports, schools, railway stations, shopping centres and offices the UVC-Cleaner is suitable to hospitals, clinics, medical practices and laboratories. Therefore he has the cleanroom class ISO4. The duration of disinfection of each room is according to the size of the room about 10-15min.

Technical data



Options.

Person recognition to deactivate the UVC-light
 Fixed push-buttons to activate a movement command
 Call-Button to configure two digital In- and Outputs (e.g. open roll-up door, request elevator, request device, etc.)
 All round running text to display the current status
 Remote access in case of any disruption with END-to-END connection
 AKKU for UVC-light with 8h or 16h running time

In- / Outputs.

W-LAN 802.11 a/b/g, 2 antenna
 Gigabit Ethernet
 USB (3x)
 RS-232 (2x)
 16 digital In- and Outputs
 4 analog In- und Outputs
 Light Pole
 Emergency stop button

Mobility Review

Speed (max.)	Wheels	Control	Radius interfering	Traversable gap	Traversable step
6,5 km/h	Abrasion resistance rubber	Differential	343 mm	15 mm	15 mm

Power Supply

Description	Voltage	Capacity	Run Time	Recharge Time	Life Expectancy	Charging Method
AMR	24VDC LiFe P04	60 Ah	16 h	3,5 h	7 years (16hrs./day, 5 days/week)	automatic (option)
UVC-lights	60V	40 Ah	8 h	3,5 h	7 years (8hrs./day, 5 days/week)	automatic (option)
UVC-lights	60V	80 Ah	16 h	3,5 h	7 years (16hrs./day, 5 days/week)	automatic (option)

All data can be rounded, may vary and are without warranty. Changes are reserved.