

AMY Robotics

AMY-ANGEEI UVC Sterilizing Robot

Authorise Distributor of AMY Robotics

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Technology With Humanity

Amy Robotics Co., Ltd. (hereinafter referred to as Amy) is an innovative AI (Artificial Intelligent) enterprise specializing in R&D, manufacturing and sales of intelligent service robots and land cruising robots. Amy is committed to building world-class home and business service robots with cutting-edge technologies and revolutionary intelligent solutions. Moreover, Amy has grasped total scenario application solutions in human-machine interaction, autonomous navigation and unmanned driving as the pioneer and explorer of the industry. Renowned as a member of the Artificial Intelligence Industry Alliance affiliated to the Ministry of Industry and Information Technology, Amy has been honored and accredited as the Eagle Plan enterprise and High-Tech Enterprise of Hangzhou City, Technological Enterprise of Zhejiang Province and High-Tech Enterprise of China.

Amy has developed a professional robot service platform, providing customizable specialized and personalized robotic solutions for diverse scenarios, including hospitals, exhibition halls, museums, government affairs halls and commercial/industrial parks. Amy's main products include universal commercial service robots, smart education robots, medical service robots and outdoor security patrolling robots. At present, these products have been widely applied to hospitals, exhibition halls, museums, airports, public security organs, procuratorial organs, people's courts and various commercial showrooms.

Amy shares the life of science and technology with you!

Honours

November 2015	Technological Small- and Medium-sized Enterprise of Zhejiang Province
June 2016	Strategic Partner of Intel Robot Innovation Ecosystem
April 2016	Membership of Chinese Association of Automation
December 2016	Director Membership of China Service Robot Industry Alliance
April 2017	Certificate of China Compulsory Certification (3C)
July 2017	Award of the 6th China Finance & Economics Summit for Outstanding Brand Values
August 2017	Annual Top 10 Innovative Service Robots
September 2017	Eagle Plan Enterprise of Hangzhou City
September 2017	The Third Prize of Intelligence Creates the Future - 2017E20 Intelligence Economic Summit
December 2017	The Most Innovative Enterprise in the AI Ranking of Zhejiang Businessmen in 2017
December 2017	Top 100 Most Promising Technological Enterprises of Zhejiang Province
April 2018	Top 10 Most Valuable Technological Innovation & Start-up Projects
October 2018	Enter the Final of Promising Group of China Innovation & Entrepreneurship Competition
November 2018	Award of 2018 China Hi-Tech Fair for Excellent Products
March 2019	National High-tech Enterprise

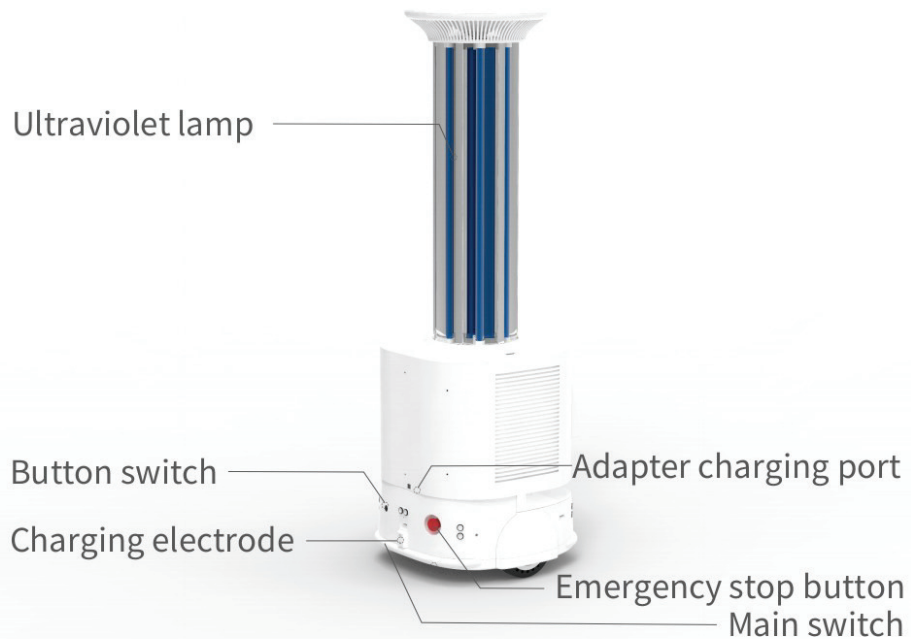
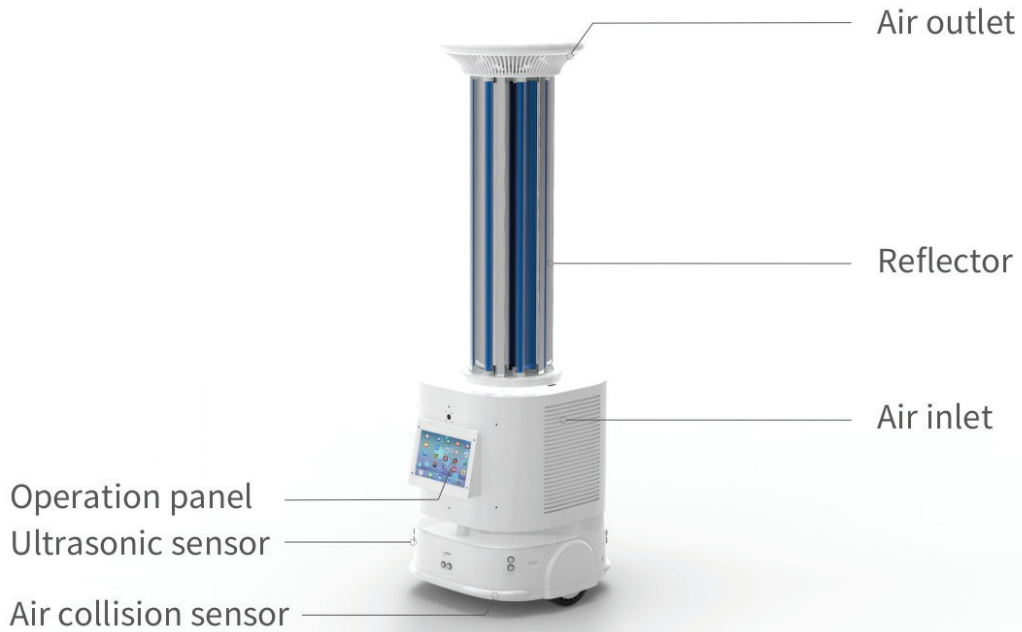
Partners



Presentation

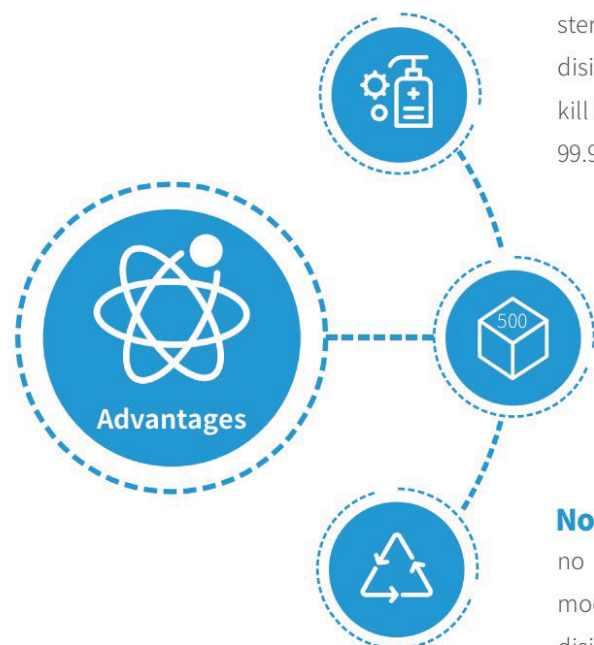
Cutting-edge Technology Stylish Appearance

AMY-ANGEEI UVC sterilizing robot kills germs in the environment by decomposing their DNA structures, thus preventing and reducing the spread of viruses, bacteria and other harmful microorganisms. This robot has two working modes: air circulating disinfection and sterilization, and UV disinfection and sterilization, and applies to a variety of complicated scenarios. It is able to move autonomously for timed, fixed-point and multi-track mobile disinfection and sterilization in large areas.



Advantages

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Strong disinfection and sterilization capacity

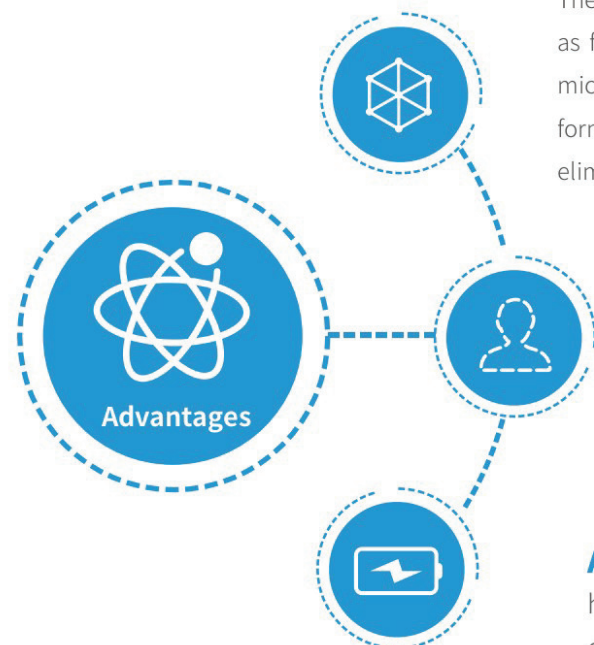
This robot has two working modes: air circulating disinfection and sterilization, and UV disinfection and sterilization. In the mode of UV disinfection and sterilization, condensed ultraviolet beams are emitted to kill bacteria and other harmful microorganisms, with a disinfection rate of 99.99%, which effectively prevents cross infection in high-risk areas

Large working space

The two working modes, i.e. air circulating disinfection and sterilization, and UV disinfection and sterilization, can efficiently guarantee the effect of disinfection and sterilization in areas. A large space can be fully covered in disinfection and sterilization using the chassis for autonomous movement

No harmful residue

no harmful residues are generated during operation in the modes of air circulating disinfection and sterilization, and UV disinfection and sterilization



Wide range of sterilization

The robot is capable of effectively killing microorganisms in the air, such as fungi, bacteria, and viruses, and has significant effects on harmful microorganisms in aerosols and the like. At the same time, PM2.5, formaldehyde, TOVC and other harmful substances in the air can be eliminated due to HEPA filtration

Unmanned operation

The robot features autonomous operation and realizes timed, fixed-point and multi-track mobile disinfection and sterilization in a large space, according to the preset route and time requirements. It reduces the investment in human resources and helps promote the working efficiency and quality

Autonomous charging

he robot is capable of autonomous charging, continuous operation, low power early warning and automatic recharging, thus effectively ensuring the endurance of this mobile device

Features

Unprecedented Cutting-Edge Technologies

Autonomous navigation

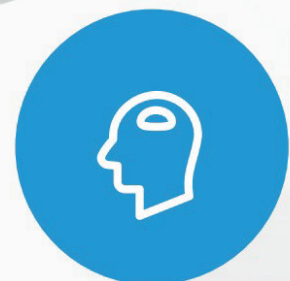
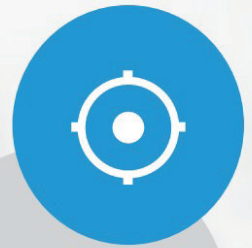
The navigation solution integrating multiple sensors ensures accurate spatial positioning and dynamic path planning.

Sterilization and disinfection

Carry the new type of dry fog space sterilization system at the efficiency up to log6.

Smart obstacle avoidance

Carry the latest lidar, ultrasonic sensor and air collision sensor to provide multiple protections and effectively deal with different complex environments.





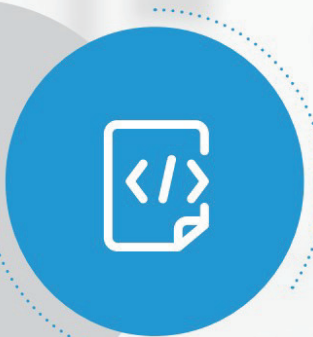
Internet of Everything

Support the information exchange and communication between human and thing, and between things, and realize environmental interaction and collaboration.



Multi-robot interconnection

Multiple robots or IoT devices can realize interaction and collaboration, thus promoting working efficiency and applicability.



Open source technology

The open robotic technical platform provides a complete set of SDK (Software Development Kit) and enable the fusion and expansion of applications for different sectors.



Customization

Provide personalized and customized services and support the customization of color, appearance and function.

Scenarios

Future Technology Turns into Reality

Medical institutions:
Isolation ward, operating room
and waiting area



Administrative organs:
Prison, court, procuratorate and
traffic management bureau



Scenarios

Future Technology Turns into Reality

Enterprises:
workshop, pharmaceutical
factory, laboratory



Public area:
School, community service center, airport,
train station, Hotel and cinema



Specifications

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Technical Item	Technical Requirement
Appearance design	<ol style="list-style-type: none">1.The shell is made of engineering plastics and stainless steel. It is antibacterial and easy to wipe2.Dimensions: 54cm long, 58cm wide and 174cm high
Hardware parameters	<ol style="list-style-type: none">1. Processor: Intel® J1900 Quad-core 2.0 GHz; Chipset: Intel® Bay trail SOC chipset2. Autonomous navigation: multi-sensor fusion navigation scheme based on at least 3 types of sensors (laser ray / speedometer / gyroscope)3. Intelligent obstacle avoidance: The robot can flexibly avoid any obstacles. It is able to avoid any obstacles under low light condition4. Motor torque: 8.1Nm (high load but low power consumption)5. The chassis has a suspension system, which can stabilize the robot while it traverses a threshold.
Operating parameters	<ol style="list-style-type: none">1. Moving speed: 0.45m/s (in the navigation mode)2. High-precision laser positioning, laser measuring precision: 2cm3. Turning performance: 360° zero-radius turning4. Routine operating time: \geq 4 hours5. It achieves autonomous movement, autonomous navigation and smart obstacle avoidance.6. You can pause the robot while it is working. It can continue its mission after the pause mode is disabled.7. The robot is capable of controlling the automatic opening/closing of electric doors via the Internet of Things.8. The robot is compatible with the extension of elevator control solutions, achieving floor-to-floor operations in different areas.9. It does not need to rebuild the environment and add path and positioning marks. The robot realizes autonomous navigation in the whole process.

Specifications

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Technical Item	Technical Requirement
Disinfection mode	<p>1. The robot can automatically patrol for sterilization and disinfection in the predetermined area. In addition, two disinfection modes can be set: Mode 1: Air circulating sterilization and disinfection. The sterilization and disinfection is equipped with high-power UV lamps. Air flows into the UV sterilization channel through the purification and circulation system. The robot is capable of killing microorganisms in the air, such as fungi, bacteria, and viruses, and has significant effects on harmful microorganisms in aerosols and the like. At the same time, PM2.5, formaldehyde, TOVC and other harmful substances in the air can be eliminated due to HEPA filtration. The robot can work continuously in 24h, and the personal safety of staff in the working area is protected through sensor induction. Mode 2: UV sterilization and disinfection. The robot is turned on in an unmanned state through sensor induction, and the sterilization and disinfection center will emit the condensed UV beams to kill bacteria and other harmful microorganisms, which prevents cross infection in high-risk areas and makes air purified.</p> <p>2. The working time can be set automatically based on the disinfection scenario.</p> <p>3. Multi-point and 360-degree surface disinfection can be performed around the disinfection target in the disinfection process.</p>
Disinfection performance	Condensed UV beams can effectively kill bacteria and other harmful microorganisms, with a maximum disinfection rate of 99.99%

Attachment: Table of Disinfection Parameter Comparison

MERS-CoV	Novel Coronavirus (2019-nCoV)	SARS-CoV
UV disinfection dose Log1(90%)=21J/m ² Log2(99%)=42J/m ² Log3(99.9%)=63J/m ² Log4(99.99%)=84J/m ²	UV disinfection dose(estimate) Log1(90%)=21J/m ² Log2(99%)=42J/m ² Log3(99.9%)=63J/m ² Log4(99.99%)=84J/m ²	UV disinfection dose Log1(90%)=21J/m ² Log2(99%)=42J/m ² Log3(99.9%)=63J/m ² Log4(99.99%)=84J/m ²
Ebola-Virus	Influenza A virus subtype H7N9	Influenza A virus subtype H1N1
UV disinfection dose Log1(90%)=55J/m ² Log2(99%)=110J/m ² Log3(99.9%)=165J/m ² Log4(99.99%)=220J/m ²	UV disinfection dose Log1(90%)=34J/m ² Log2(99%)=68J/m ² Log3(99.9%)=102J/m ² Log4(99.99%)=136J/m ²	UV disinfection dose Log1(90%)=34J/m ² Log2(99%)=68J/m ² Log3(99.9%)=102J/m ² Log4(99.99%)=136J/m ²

Professional sterilization and disinfection robot platform

Carry the medical sterilization and disinfection system, provide the open technical platform and support customizations

