

PRODIGY
LIGHTING

SIRIUS



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Product Specifications



Sirius, a high power sterilization robot combines atomizer spray disinfection methodology and germicidal UV-C lighting to sterilize both air and surfaces to mitigate the risk of contracting an infection. The thermal imaging module delivers precise real-time temperature measurements to detect abnormal body temperatures with accuracy typically lower than $\pm 0.5^{\circ}\text{F}$. Utilizing a LiDAR-based SLAM navigation system, Sirius can efficiently navigate avoiding obstacles at a speed of 0.7m/s and detect targets at an 80ft range.

Autonomous 360° disinfection

With an atomizing speed of 3000g/h, Sirius dispenses the atomized liquid ($<10\mu\text{m}$) in all directions at the rate of 2-5L/h and disinfects the area with 99.99% efficiency. The automatic, 6-set, adjustable nozzle disperses the liquid with the help of high-speed airflow to reach the required space. Sirius can also be configured according to the business environment and remotely operated to reach locations that are normally hard to access.



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Medical grade UV-C disinfection

Shorter wavelength ultraviolet light is proven to kill pathogens and is recommended to be used as a germicidal and to disinfect the air, water, and surfaces. Exposure to UV-C radiation destroys the nucleic acid and damages the DNA of bacteria and viruses rendering them neutralized. In addition to liquid atomization disinfection, Sirius activates UV-C disinfection at 253.7nm wavelength and disinfects small surfaces and closed infrastructures efficiently with only a short exposure time.

Laser-guided navigation

Sirius is powered by LiDAR-based Simultaneous Localization and Mapping (SLAM) navigation system that enables it to explore and understand its environment while efficiently avoiding obstacles. The high processing speed and responsivity allow Sirius to cover an area of 25000m² effectively moving at 0.7m/s with a navigation accuracy of 5cm. Sirius is further capable of performing real-time face recognition and multi-target body temperature detection with an accuracy of $\pm 0.5^{\circ}\text{F}$.



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Technical Data

Atomizer Unit	Ultrasonic Atomization	6 x Automatic nozzle disinfectant
	Atomization efficiency	0.8 gal (US) per hour
	Liquid storage capacity	4.2 gal (US)
UVC Lighting	Lighting system	2 x UVC Ultraviolet lamp
	Power consumption	21W
	Wavelength	253.7 nm
Thermal Imaging Module	Temperature measurement	Thermal sensor
	Measurement type	Non-contact measurement
	Detection distance	3 ft - 6.5 ft
	Accuracy	±0.5 °F
Face Recognition	Detection type	AI-based real-time detection
	Target identification	Multi-target temperature measurement
Display	Screen type	Capacitive touch screen
	Screen size	12 inch
	Resolution	1024 x 768
Data Processing & Interface	CPU	RK3288 ,Quad-core processor
	Memory	2GB RAM (Up to 4GB)
	Flash	8G (Up to 128G)
	Network Module	Wi-Fi 2.4G 802.11 b/g/n
Navigation	Navigation type	LiDAR Navigation System
	Scan radius	Up to 80 ft.
	Navigation accuracy	5 cm
	Obstacle avoidance	SLAM/Stereo navigation
	Moving speed	0.7 m/s
Power Supply	Battery	Lithium
	Battery capacity	24 V 40Ah
	Charging pile input	AC 220-240V/2A
	Charging pile output	25.2V/10A Max
	Stand-by time	12 Hours
Body	Color	White standard (Custom available)
	Dimensions	21.2 inch x 21.2 inch x 43.3 inch
	Maximum height	Up to 59 inch
	Weight	110 lbs.



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