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One Year On, Autonomous Robots Continue the Fight Against COVID-19

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"The global cleaning and disinfection robots market is projected to reach $2.3 billion in revenue by 2025" says Mr Ang Chor Chen, Chief Executive, SESTO Robotics



By now we have become accustomed to fundamental behavioural changes in our everyday lives caused by the COVID-19 pandemic, from contact tracing to working from home. The more we engage in these activities that just months ago were new to us, the more “normal” and inconsequential they become.

Our perception of robots in general, and Autonomous Mobile Robots (AMRs) in particular, and their place in our society is following a similar pattern.

Autonomous robotics are no longer confined to factory floors, however. While robotics have already experienced rapid advancements in recent years, COVID-19 has further accelerated the innovation and application of AMRs across industries. These robots are here to stay, and will soon become far more prevalent. Estimated at US$14.1 billion in 2020, the global service robots market is now projected to more than triple in value to US$50.9 billion by 2027 due to the pandemic.

A Robotic Battle Against COVID-19

As the pandemic unfolded, robotics engineers around the world quickly shifted gears to develop new applications and adapt existing ones for need-based products relevant to the world’s changed dynamic. One such innovation is autonomous mobile disinfection robots.

These robots start with a base autonomous unit used by manufacturers. With safety and easy to use features in place, they are then outfitted with such disinfectant equipment as sprays and/or UV-C lights, both of which eliminate 99.9% of bacteria, germs, and viruses. Singapore's SESTO Robotics, similarly has conceptualized SESTO HealthGUARD capable of advanced surface disinfection using a dual-function autonomous mobile disinfection robot to assist in the pandemic tussle.

Autonomous Disinfection Robots at Work

Proven to be reliable, safe, and effective, mobile disinfection robots now play a public role in the fight against COVID-19 everywhere from manufacturing plants and hospitals to events, restaurants, and public transportation.

For example, robots that can disinfect hospital rooms in less than 20 minutes have been used in several facilities in Europe, Asia, and the United States. Government agencies, hotels, and office buildings around the world have all increased orders of mobile disinfection robots.

Given these and other advantages, the global cleaning and disinfection robots market is projected to reach $2.3 billion in revenue by 2025, while the disinfectants market is expected to reach $8.3 billion by 2027.

While the coronavirus pandemic has spurred greater focus on autonomous disinfection robots, the market for mobile robotics in general is rapidly surging due to consumer demand and industry needs. The global autonomous mobile robots market size was valued at $38 billion revenue in 2019. This is expected to reach $145.5 billion in 2026.

The market potential of AMRs is enormous. Even after we conquer COVID-19, these robots will continue to play an increasingly visible role in our everyday lives as we push the boundaries of innovation, and develop new robotic solutions for consumer and industry needs.