

# THE NEW ERA OF SMART CLEANING



## GAMBiT™ for Whiz

PROTECTION FROM THE HIDDEN AND THE INVISIBLE

# The New Era of Smart Cleaning

## Protection from the hidden and the invisible

Traditional and manual cleaning protocols alone can no longer efficiently provide comprehensive protection needed to combat life-threatening and infectious diseases, according to WHO, fomite transmission is a likely infection route and is caused surface contamination by “hidden” dusts (i.e. pollen, mold) and “invisible” pathogens (bacteria, virus).

Avalon SteriTech is partnering with SoftBank Robotics to develop innovative products and technologies in the field of cleaning and bio-decontamination, where bio-decontamination capabilities can now be integrated into Whiz, the world-leading autonomous cleaning robot. The 2-in-1 robotic solution aims to complement existing protocols, resulting in higher cleaning productivity and efficacy.

## AI-Powered Disinfection and Cleaning Revolutionary Solution to Biosafety and Hygiene



### Word-class AI Disinfection and Cleaning

- **Best-in-class** autonomous-driving AI for route design and obstacle avoidance
- Disinfection and vacuum cleaning **2-in-1**



### Easy to Set Up, Easy to Use, Easy to Monitor

- **User friendly** OS allowing for route design and deployment
- **Check route completion** records to provide peace of mind



### Dry-mist Spray Technology

- Unique nozzle and pump technology to generate **<10 micron** disinfection particles
- High material and electronic equipment compatibility



### 24/7 Accessibility and Reliability

- **Avoid inconsistent** performance caused by human error or spot-cleaning
- Optimize operations and workflow with less effort but a better result

## Product Features User-Experience Driven

### EASY TO USE

Powered by BrainOS, this product can be used straight out of the box.

### SAFE FUNCTIONALITIES

Automatically avoids people, obstacles (incl. glass panels), walls, cliffs, and other hazards.

### REAL-TIME ALERTS

Notifications can be sent over-the-air whenever cleaning routes are completed, or it needs a hand.



### MULTI-ANGLE COVERAGE

Atomising nozzle can be adjusted to target zone, surface or ground bio-decontamination.

### RESPONSIBLE SPRAYING

Sprayer will only be activated if Whiz is in operation, preventing excessive use of chemicals.

### INTEGRATED PRODUCT DESIGN

Cohesive design with Whiz allows for robust durability and seamless user experience



## Science Driven Approach to Environmental Hygiene Research Findings

**80%**  
decrease

in airborne microorganism in indoor environment. This is supported by the positive correlation between floor cleanliness and air cleanliness.<sup>1</sup>

**>90%**  
surface pathogens eliminated

**EVICATE™**, a Quaternary Ammonium Compound (QAC) formulation developed by Avalon SteriTech, can achieve >99% microbial reduction.<sup>2</sup>

**1,500m<sup>2</sup>**  
coverage on a single charge

which is more than three and a half basketball courts.

**100%**  
Autonomous

disinfects and cleans room (20 m<sup>3</sup>) in <30 min.<sup>3</sup>

Reference:

1. SoftBank Robotics conducted research in Tokyo, JAPAN to evaluate the effectiveness of Whiz to clean office buildings. The study was conducted across 116 sites.

2. Disinfectant was tested in accordance to EN 1276 standard.

3. Disinfection and cleaning time is dependent on route design for Whiz.

# Product Specification \*Specifications and/or design details may change without prior notice.



## SoftBank Robotics Whiz

|                            |  |
|----------------------------|--|
| Dimension (mm)             | 474 (L) x 455 (W) x 653 (H)                        |
| Weight (excluding battery) | 30 kg  |
| Vacuum cleaning coverage   | 500 m <sup>2</sup> / hour                          |
| Continuous operation       | 3 hours (normal mode)                              |
| Battery charging time      | 4 hours  |
| Max. speed                 | 1.8 km / hour max                                  |
| Rated output               | 29.4 V / 8 A x 2 slots                             |
| Safety features            | LIDAR, 3D camera, impact sensor, anomaly detection |



## Avalon SteriTech GAMBIT™

|                    |                             |
|--------------------|-----------------------------|
| Dimension (mm)     | 389 (L) X 456 (W) x 595 (H) |
| Gross weight (kg)  | 23.5                        |
| Max. pump pressure | 2.1 bars                    |
| Tank volume        | 3 litre                     |
| Average run-time   | 1 hour                      |
| Voltage            | 24 VDC                      |
| Rated output       | 180 W                       |
| Noise              | 70 dBA                      |