



## Scrubber 50 Pro Al-Powered Robotic Floor Scrubber

## **PRODUCT RANGE**



## **ABOUT GAUSIUM**

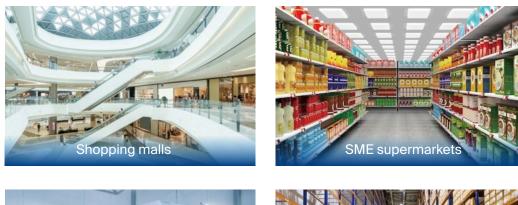
Gausium Robotics develops and manufactures cleaning robots to co-work with people. The Gausium cleaning robots are comprehensive range of floor cleaning robots, which includes: Vacuum 40, Scrubber 50, 50 Sprayer, Scrubber 75, Sweeper 111 and more in the pipeline. They have been deployed in thousands of commercial, institutional and industrial facilities around the globe to deliver professional and consistent cleaning services.

Founded in 2013 out of a passion for autonomous driving, Gausium Robotics built its class-leading autonomous navigation based on advanced SLAM technology and integrated it into cleaning machines. It has since grown into a global leader and is now setting the benchmark for the cleaning robot industry. Today, it has rapidly expanded into a team of over 1000 employees with its headquarter in Shanghai and overseas offices in Singapore, Hong Kong and the Netherlands.



## **APPLICABLE SCENARIOS**

Gausium Scrubber 50 Pro is ideal for cleaning highly dynamic indoor environments, including Shopping malls, SME supermarkets, Manufacturing plants, Logistics warehouses, etc.







## **FLOORING TYPES**

The Srubbers series are designed for different types of hard, water resistant flooring, including Natural Stone, PVC & Vinyl flooring, Ceramic tiles, Epoxy, Concrete, etc.











# **CORE STRENGTHS**

### SIMPLICITY – Minimal Human Intervention Operation (M.H.I.O)



#### **Easy Deployment**

- User-friendly display with intuitive menu, accelerating setup and adoption
- Flexible operation methods, controlling the machine through touch screen, mobile APP or cloud platform
- Mapping, map editing and task creating can be done by the operator on the display without external assistance



#### **Minimal Maintenance**

- Optional work station for automatic charging, water filling & draining, realizing 7/24 uninterrupted operation
- Only 2 hours required per month for general maintenance



#### Dual Operation: Autonomous + Manual

• Switches between autonomous and manual mode with a simple command

### **INTELLIGENCE** – Boldly go where no other cleaning robot has gone before



### Auto Spot Cleaning driven by Deep Learning

•Scans the cleanliness of the near by floor and automatically performs spot cleaning where waste or stains are detected

 Brings up to 4X efficiency improvement and reduces energy consumption by cleaning only where it is needed



#### Advanced AI navigation system empowered by semantic SLAM

- Real-time Auto-cover: Dynamically maps and plans cleaning paths to maximize cleaning coverages in a changing environment
- Incredibly fast mapping: 30 mins to map a 2,000 sqm site(\*)
- Flexible map editing: Mark virtual walls and highlight areas to avoid collision and damage



#### Remote task scheduling, activation and maintenance

- Real-time data transmission and monitoring, getting real-time information of the operational status
  - and cleaning progress
- Sends detailed cleaning task reports via email or SMS, letting your data demonstrate your



#### Flexible task combination, customizing cleaning plans in complex scenarios

- Teach & Follow (Auto repeat)
- AutoCover (Auto fill-in)
- Real-time AutoCover (Returning to occupied spaces)
- Sketch (Point to point)
- Auto Spot Cleaning (Auto point to point)



#### Recovery

• Resumes previous unfinished task after interruption

### **PRODUCTIVITY** – Exponentially improves cleaning efficiency



Advanced Cleaning Efficiency – Up to 1,800 sqm/h (\*)

3 in 1 - Integrates scrubbing & drying, sweeping, mopping

No-hassle squeegee system - removes liquid without collision or scratch



### Near to wall cleaning

• 5-10cm edge-to-edge cleaning

### MANEUVERABILITY - Access restricted area while cleaning



Agile and compact design

• 93cm passage width + 120cm turning diameter - Able to clean narrow corridors

### SAFETY - Cutting-edge obstacle detection & avoidance

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### Multi-sensor fusion

- Reacts to the changes correspondingly and automatically while cleaning, detecting and avoiding static and dynamic obstacles from all directions and in real time
- Equipped with E-stop button, anti-slip wheels, anti-collision touch bumpers, integrated signaling lights, safety audio message playback etc., providing all-round safety
- Left/Right depth cameras (50 Pro-exclusive) customized for highly dynamic, complex environments

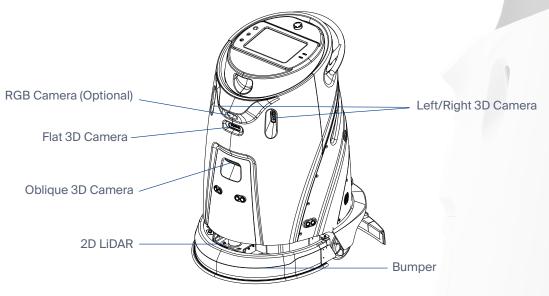


Figure 1: Scrubber 50 Pro Sensors

# **KEY BENEFITS**

### SUSTAINABILITY - Create long-term value by taking an eco-friendly approach



### **Energy Saving**

Calculates the most efficient path to reduce energy consumptions

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### Water Saving

- Unique 5-stage water recycling filtration system
- Saves up to 80% fresh water

## **COST-EFFICIENCY** – Invest in Gausium's quality and technology that significantly drive down cleaning cost



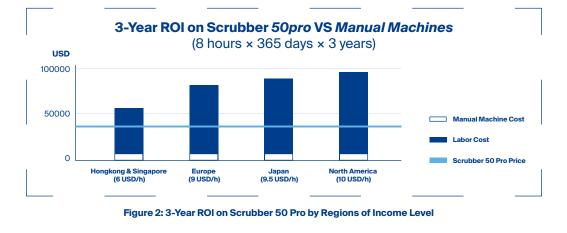
### Low total cost of ownership

• The large capacity, Lithium batteries, elevator integration and optional work station, all ensure a high ROI and low maintenance costs



### Cut down labor cost

• Functions of task scheduling and real-time reporting simplify your cleaning management and lower labor costs



## **BETTER IMAGE** – Enhance facility Image by embracing a consistent, sustainability oriented clean

### Marketing value

- The visual appearance of the Gausium Robot shows visitors your taking their health and safety seriously, demonstrating your company as a clean and trendsetting organization
- The adoption of Gausium's water-saving and energy-efficient cleaning solutions manifests your company's commitment to CSR initiatives

## WHAT OUR CUSTOMERS SAY

### "

The robot takes a lot of time off our work in the area, which we can put into more elaborate handicrafts. We have tested it intensively here and are sure that it will soon support us permanently in our day-to-day business.

(translated from German)

– Georgios Sarantos Dussmann Service (Germany)

### "

The cleaning service partners operating the Gausium robot at the airport generally find it safe, easy and efficient to use it. The robot's adoption and awareness of its capabilities by the cleaning team and leveraging on its technology for its daily cleaning operations is increasingly improving.

### "

– Jerome Francis Changi Airport Operations Management (Singapore)

### "

Our robots work 24 hours a day without compromising the efficiency. So, we provide a cleaner service with a unique quality and comfort level for our customers.

(translated from Polish)

"

Seris Konsalnet (Poland)

## "

With this technological robot, it renews itself day by day. It has systems that can take the elevator. Scrubber 50, a small one of which can take the elevator, charge itself, fill and empty its own water...If it sees a living thing, it changes its path. You can manage it via the panel, web or mobile. You have the cleaning done over and over again by using the remote panel without being there.

"

(translated from Turkish)

– Nazlı Uzunlar UFS Facility Services (Turkey)

### "

Our train presentation and station cleaning teams have been working tirelessly throughout the pandemic and the new Eco Bot (Scrubber 50) will help free up a lot of time, so colleagues can focus on additional sanitisation.

> – Simone Bailey Greater Anglia (UK)

## "

Continuing to implement our innovative cleaning solutions with these robotic floor scrubbers and driers... There's a reason we're one of the UK's leading cleaning service providers.

"

Mitie Cleaning Services (UK)

### **SPECIFICATION**

ITEM / VERSION	DISC BRUSH	ROLLER BRUSH
DIMENSION	L860*W700*H1030 MM   L33*W27*H40 IN	
UNLADEN WEIGHT	150 KG   330 LB	140 KG   308 LB
SCRUBBING WIDTH	500 MM   20 IN	460 KG   18 IN
SQUEEGEE WIDTH	700 MM   27.6 IN	
MAX. THEORETICAL PRODUCTIVITY	1,800 M2/H   13,975 FT2/H	1,656 M2/H   17,825 FT2/H
BRUSH PRESSURE	25 KG   55 LB	18.3 KG   40.3 LB
CLEAN / RECOVERED WATER TANK	24/18 L   6.3/4.8 GAL	
TRASH TRAY	/	2*0.6 L 2* 0.16 GAL
GRADEABILITY	4.6°	
MAX. MOVING SPEED	1 M/S   2 MPH	
MIN. DISTANCE FROM WALL	50-100 MM   2-4 IN	
MIN. PASSABLE WIDTH	930 MM   36.6 IN	
MIN. TURN-AROUND WIDTH	1,200 MM   47 IN	
BATTERY TYPE	LITHIUM IRON PHOSPHATE	
BATTERY CAPACITY	40/60 AH	
CHARGING TIME	≈1.5H (40 AH) / 2.0 H (60 AH)	
UPTIME (40 AH/60 AH)	≈2-6 H / 3-8 H	≈2-4 H/ 3-6 H
SENSOR SYSTEM	2D LIDAR,3D CAMERA, AIR PRESSURE BUMPER, ANTI-DROP SENSOR OPTIONAL: RFID CLIFF SENSOR, RGB CAMERA	

\*Due to ongoing product updates, specifications are subject to change without notice and will vary throughout the operation.



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