



ALPHAROBOTICS SOLUTIONS
SMART TECH. HUMAN TOUCH

AlphaRobotics OMNIE

AI-Powered Robot Floor Cleaner for High-Dynamic Environments

Omni Power for a Next-Level Clean

SWEEP

SCRUB

DUST
MOP



Ceramic

Artificial
Stone

Natural
Stone

Concrete

PVC

Epoxy

360° vision, 360° LiDAR and AI spot cleaning — engineered for high-dynamic environments.



Operational Overview & Applications

The AlphaRobotics OMNIE is an AI-powered robot floor cleaner built for high-dynamic environments. OmniVision delivers 360° camera coverage with 360° object detection and a bird's-eye view for enhanced obstacle avoidance and precise navigation, while OmniLiDAR provides 360° LiDAR coverage optimized for large, highly dynamic industrial environments.



360°

Camera coverage &
object detection

3 h / 8 h

Runtime — scrubbing /
dust mopping &
sweeping

2 h

Charging time

Ideal Environments

Ceramic

Artificial
Stone

Natural
Stone

Concrete

PVC

Epoxy

Core Operating Value

OmniClean — 780 mm

Dual roller brushes and dual side brushes deliver a 780 mm cleaning width, collecting debris into the built-in debris tray.

OmniSpotCleaning

AI deep learning precisely identifies and cleans both dry and wet waste on demand.

360° awareness

OmniVision cameras plus OmniLiDAR deliver full-surround detection and a bird's-eye view in dynamic spaces.



Key Technology Features

Four Omni technologies — cleaning, vision, LiDAR and AI spot cleaning.

OmniClean

Offers a 780 mm cleaning width with dual roller brushes and dual side brushes, efficiently scrubbing and collecting debris into the built-in debris tray.

OmniVision

360° camera coverage with 360° object detection and a bird's-eye view for enhanced obstacle avoidance and precise navigation.

OmniLiDAR

360° LiDAR coverage, optimized for large, highly dynamic industrial environments.

OmniSpotCleaning

Precisely identifies and cleans both dry and wet waste, powered by AI deep learning.

Disc or Roller Brush

Choose between disc-brush scrubbing and roller-brush sweeping configurations to match the facility.

Multi-Floor Versatility

Applicable on natural stone, artificial stone, ceramic, concrete, PVC and epoxy flooring.





Safety Systems & Maintenance

Full-surround sensing with a comprehensive multi-sensor safety suite.

360° Object Detection

OmniVision cameras and 360° object detection with a bird's-eye view keep people, machines and goods safe around the robot.

OmniLiDAR Coverage

360° LiDAR is optimized for large, highly dynamic industrial environments with constant traffic.

Multi-Sensor Safety Suite

3D LiDAR, 2D LiDAR, 3D depth camera, RGB camera, anti-collision and anti-drop sensors work together for safe operation.

AI Spot Response

OmniSpotCleaning identifies dry and wet waste with AI deep learning and cleans it precisely on demand.





Complete Specification Matrix

Manufacturer specifications preserved in dual units — imperial and metric.

PARAMETER	TECHNICAL VALUE
BRUSH CONFIGURATIONS (DISC BRUSH ROLLER BRUSH)	
Net Weight	Disc Brush: 346.1 lb 157 kg Roller Brush: 326.3 lb 148 kg
Cleaning Width	Disc Brush: 20.5 in 520 mm Roller Brush: 16 in 406 mm; with side brushes: 30.7 in 780 mm
Max. Cleaning Efficiency (Theoretical)	Disc Brush – Scrubbing: 28,212 ft ² /h 2,621 m ² /h; Dust Mopping: 38,793 ft ² /h 3,604 m ² /h Roller Brush – Scrubbing: 22,023 ft ² /h 2,046 m ² /h; Sweeping: 42,313 ft ² /h 3,931 m ² /h; Dust Mopping: 38,793 ft ² /h 3,604 m ² /h
GENERAL SPECIFICATIONS	
Dimension (L×W×H)	31.9 × 27 × 42.1 in 810 × 700 × 1,070 mm
Max. Runtime	Scrubbing 3 h; Dust Mopping 8 h; Sweeping 8 h
Charging Time	2 h
Clean / Waste Water Tank	8.7 gal / 6.3 gal 33 L / 24 L
Gradeability	4.6°
Min. Pass Width	31.5 in 800 mm
Min. U-turn Width	43.3 in 1,100 mm
Max. Cleaning Speed	3.1 mph 1.4 m/s
Sensor System	3D LiDAR, 2D LiDAR, 3D Depth Camera, RGB Camera, Anti-Collision, Anti-Drop

[1] The specifications are derived from manufacturer lab test results; actual performance data may vary in specific applications.

[2] Alternative configurations compliant with IEC 63327 are available upon request. Please note that the corresponding specifications may vary depending on the chosen configuration.



ALPHAROBOTICS SOLUTIONS
SMART TECH. HUMAN TOUCH

AlphaRobotics OMNIE

The Reliable, Hassle-free Robots You Can Trust



Leading the New Era of Cleaning Robotics

AlphaRobotics Solutions LLC

www.AlphaRoboticsAi.com

Info@AlphaRoboticsAi.com

(818) 659-8338

Smart Tech. Human Touch.