



ALPHAROBOTICS SOLUTIONS  
SMART TECH. HUMAN TOUCH

# AlphaRobotics L4

## Autonomous Scrubber Dryer

Clean Like A Pro

SCRUB



Retail

Healthcare

Hospitality

Shopping  
Mall

Office  
Building

Advanced edge cleaning — less than 1.2 in / 3 cm distance from the wall.



## Operational Overview & Applications

The AlphaRobotics L4 is a compact yet highly productive autonomous scrubber dryer, tailored for crowded environments. Featuring advanced edge-cleaning technology with a distance from the wall of less than 1.2 in / 3 cm, it ensures thorough cleaning in every nook and cranny.



**20,925 ft<sup>2</sup>/hr**  
Max. theoretical  
productivity

**44 lbs | 20 kg**  
Brush pressure

**4.5 hours**  
Max. runtime

### Ideal Environments

Retail

Healthcare

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### Core Operating Value

#### Edge-cleaning technology

Thorough cleaning with less than 1.2 in / 3 cm distance from the wall — every nook and cranny covered.

#### Crowded-aisle navigation

An impressive 43.3 in / 1100 mm turn-around width ensures easy passage through crowded aisles.

#### Smart Flow sustainability

Advanced water-saving system adjusts water flow according to speed, reducing water and detergent usage.



## Key Technology Features

Intelligent cleaning at your fingertips — perception, control and sustainability.

### Nvidia Processing Chip — 32 TOPS

A formidable Nvidia processing chip with 32 TOPS of AI performance drives intelligent cleaning decisions.

### 10.1-inch Touch Screen & Mobile App

User-friendly mobile app and 10.1-inch touch screen deliver unparalleled adaptability and seamless control.

### Stain Perception

Advanced stain and liquid detection, driven by powerful AI features, ensures a thorough, targeted cleaning approach.

### 32-Beam 3D LiDAR — 492 ft / 150 m

Long-range 3D LiDAR with 492 ft / 150 m detection range builds an impenetrable safety net.

### Smart Flow Water Saving

Pioneering sustainability: adjusts water flow according to speed — not just cleaning, responsible cleaning.

### Workstation & Quick Maintenance

Revolutionary workstation autonomously refills water/detergent and charges the robot; magnetic brush, 30-second squeegee blade replacement and large opening water tank.





## Safety Systems & Maintenance

Unmatched safety assurance — a multi-sensor shield for precision navigation.

### 492 ft / 150 m Detection Range

32-beam 3D LiDAR, 3D depth cameras and a bumper sensor create an impenetrable safety net around the machine.

### Protruding Object Detection

Detects protruding objects in the environment and navigates around them with precision.

### Low Object Detection $\leq 1.2$ in / 3 cm

Even low-lying objects down to 1.2 in / 3 cm are detected and avoided seamlessly.

### Cliff Detection

Reliable cliff and drop detection ensures safe operation near stairs, ramps and loading edges.





## Complete Specification Matrix

Manufacturer specifications preserved in dual units — imperial and metric.

| PARAMETER                     | TECHNICAL VALUE                                       |
|-------------------------------|-------------------------------------------------------|
| <b>DIMENSIONS</b>             |                                                       |
| Length                        | 31.9 in   810 mm                                      |
| Width (w/o squeegee)          | 24.2 in   615 mm                                      |
| Height                        | 42.3 in   1,075 mm                                    |
| Weight                        | 331 lbs   150 kg                                      |
| Cleaning Width                | 17.7 in   450 mm                                      |
| Squeegee Width                | 29.1 in   740 mm                                      |
| <b>CLEANING</b>               |                                                       |
| Max. Theoretical Productivity | 20,925 ft <sup>2</sup> /hr   1,944 m <sup>2</sup> /hr |
| Brush Pressure                | 44 lbs   20 kg                                        |
| Brush Speed                   | 270 RPM                                               |
| Solution Tank Capacity        | 10 gal   38 L                                         |
| Recovery Tank Capacity        | 9.5 gal   36 L                                        |
| <b>MOVEMENT</b>               |                                                       |
| Max. Speed                    | 2.68 mph   1.2 m/s                                    |
| Min. Distance from Wall       | 1.2 in   3 cm                                         |
| Min. Passable Width           | 31.9 in   810 mm                                      |
| Min. Turn-around Width        | 43.3 in   1,100 mm                                    |

| PARAMETER                   | TECHNICAL VALUE                                       |
|-----------------------------|-------------------------------------------------------|
| Gradeability                | 8%                                                    |
| <b>POWER</b>                |                                                       |
| Battery Type                | LFP                                                   |
| Battery Capacity            | 70 Ah                                                 |
| Rated Voltage               | 24 VDC                                                |
| Charging Time               | 2.7 hrs                                               |
| Max. Runtime                | 4.5 hrs                                               |
| <b>SAFETY FEATURES</b>      |                                                       |
| Sensing                     | 3D LiDAR, 3D Depth Camera, Bumper Sensor, IMU Sensor  |
| <b>SOUND PRESSURE LEVEL</b> |                                                       |
| Sound Pressure Level        | At least as 66 dB(A)                                  |
| <b>KEY COMPONENTS</b>       |                                                       |
| Process Chip                | Nvidia processing chip with 32 TOPS of AI performance |
| Localization Sensor         | 3D LiDAR with 492 ft / 150 m detection range          |

Note: Technical values are reproduced from the source brochure. Product performance may vary by site conditions, floor condition, route design, maintenance status, and cleaning mode.



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# AlphaRobotics L4

**The Reliable, Hassle-free Robots You Can Trust**



Leading the New Era of Cleaning Robotics

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**Smart Tech. Human Touch.**