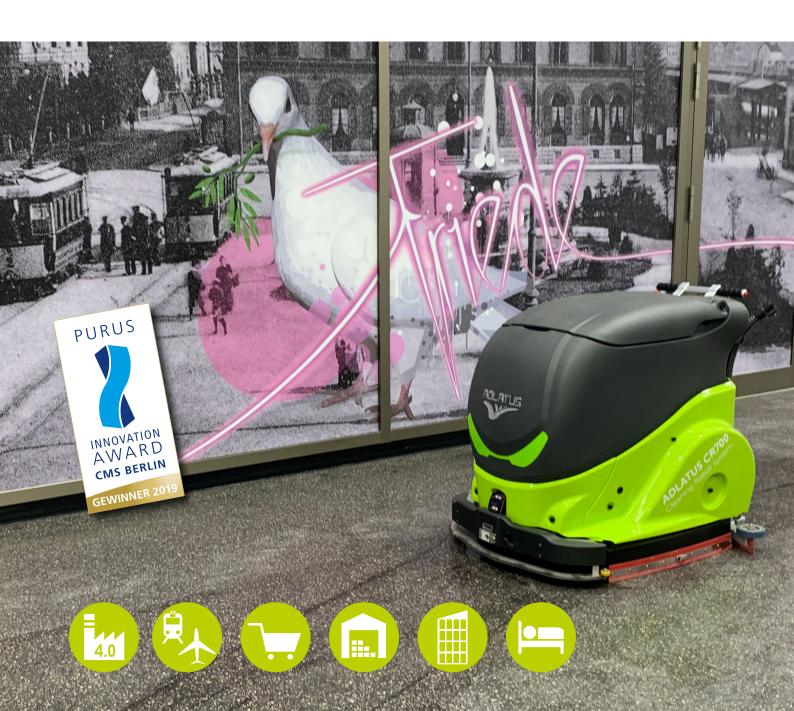


# **ADLATUS CR700**

Autonomous cleaning robot system



## DESIGNED TO SERVE...

#### **MISSION**

#### Designed to serve ...

is the mission of ADLATUS Robotics GmbH.

The digitization and globalization push the change in the service sector of the facility management and demand new products and solutions from the companies. ADLATUS Robotics GmbH supports this change and develops autonomous professional Service Robots.

Adlatus is Latin and means helper. And that's the philosophy of the ADLATUS Robotics GmbH. We want to support the companies with a helper on their side, which is able to handle tasks by itself. Our helpers should ease your life and work and support you like a colleague. The Professional Service Robots are designed to fit in their domain and are able to handle different tasks if needed.

ADLATUS Robotics GmbH develops, manufactures and distributes Service Robots and offers customers complete solutions including consulting, commissioning, training and service.

#### **INNOVATION, EXPERTISE & QUALITY**

...these are our potencies in the development and implementation of autonomous Service Robots.

To ensure easy handling with our Service Robots we provide our customers a competent team aside from planning to commissioning.

Our employees, with over 20 years of experience in robotics technology, know the customers' requirements to autonomous robots. Therefore we are able to successfully develop and implement innovative solutions with the latest technologies.

The final assembly of our Service Robots takes place in Ulm / Baden-Wuerttemberg. Thereby, much importance is placed on the use of high quality components and the use of qualified professional personnel.

Winner of the DB Automated Cleaning Challenge











#### **CUSTOMER BENEFITS**

Cost savings, work facilitation, quality improvement or sustainability are examples of factors that motivate our customers to use our products.



#### **Economics**

The reduction of personnel expenses through the independence of night and holiday surcharges and the independence of skilled personnel can significantly improve the efficiency of the cleaning.



#### **Sustainability**

Think in the long term - act responsibly in a spirit of partnership. Autonomous Service Robots are health-promoting, relieve the burden on physically demanding work and increase safety in the working environment.

Resources are used responsibly - for example, the water consumption of the cleaning robot can be individually adapted to the degree of dirtiness.



#### **Transparency**

Fully automated logging after each use of the Service Robots facilitates the documentation and proof of services for billing purposes, performance checks or audits. For example, the ADLATUS CR700 cleaning robot creates a detailed protocol on the cleaned areas.



#### Safety

There is no chance that the Service Robot can collide with people. The CR700 waits or evades colleagues / people who are in the working environment in time.

The use of our autonomous Service Robots can reduce the risk of security issues and even terrorist attacks by minimizing the possible need for frequently changing and possible unchecked external staff.



#### **Simplicity**

The CR700's utility is simple and intuitive. You can save programs for the cleaning staff, which simply need to be started. After a short briefing, everybody is able to do that. The start is also possible via smartphones and tablets.



#### Industry 4.0

In automated production facilities, the Service Robots can be integrated into processes, such as WiFi.



#### Marketing & Identity

Beside all above mentioned advantages, our autonomous Service Robots could also distinguish your building(s) and even your corporate identity in a positive way, by increasing your image as a trend setting innovative leader in your industry.

# ADLATUS CR700

#### **FULLY AUTOMATED CLEANING ROBOT**

With the ADLATUS CR700 we managed to develop a cleaning machine which operates without tying up cleaning staff permanently. The concept is based on the expertise of a professional cleaning machine combined with the cleaning performance of a robot, connected with the aim to achieve a higher cost-efficiency at optimum cleaning results.

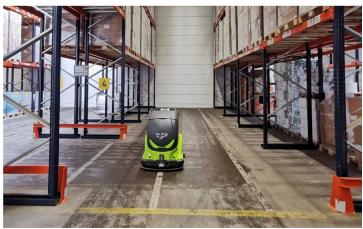
Through the simple and user-friendly interface of the CR700 it can easily be set up in three steps. After that, the desired cleaning areas can be stored on the robot.

The user interface of the CR700 is designed intuitivly so that the robot can be started by the cleaning staff easily. Daily repetitive cleaning tasks as well as the individual instructions of the cleaning robot are possible. For a spontaneous cleaning, the robot can also operate in manual mode.













#### THE TECHNICAL ADVANTAGES AT A GLANCE



#### **Dual Use**

Typically, the ADLATUS CR700 cleans completely autonomously. A manual operation mode can additionally be selected.

If a spot requires sudden cleaning, the robot can just clean the spot in manual operation. We call it Dual Use!

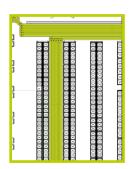


#### **Navigation**

The advanced navigation system of ADLATUS CR700 provides reliable movement in complex environments.

Its powerful sensors and intelligent processing of sensor data allows to confidently capture objects which are very difficult to be detected, such as people or hanging materials: Depending on the environment / building structure, various approaches of navigation can be selected.

One location methodology is used in objects with many fixed obstacles, such as walls and shelves, without the use of artificial landmarks. The other localization methodology is used in environments with strongly varying obstacles and with few static structures. For this purpose, artificial landmarks are installed in the object.





#### **User Interface**

With an easy and friendly user interface, the ADLATUS CR700 can be started by the cleaning staff without complications. Either with the touch display directly on the robot or remotely from a mobile devices such as a tablet or smartphone.





#### **Service Station**

If the battery charge is exhausted, the waste water tank full or the clean water tank empty, the ADLATUS CR700 will autonomously seek for its Service Station and refill its supplies. This allows a fully autonomous operation over longer periods of time.





#### Connectivity and documentation

The ADLATUS CR700 offers a multitude of options to communicate with its user.

It can be integrated into the building infrastructure and, for example, transmit the fully automated documentation of the cleaning carried out by e-mail.



#### Robust construction and industrial suitability

Our service robots are characterized by a robust construction, which is designed for a permanent handling. High-quality components are used, such as stainless steel elements or maintenance-free brushless motors.

# ADLATUS CR700

# CLEANING ROBOT CR700

### **TECHNICAL INFORMATION**

#### **DIMENSIONS OF THE CR700**

weight	max. 230	kg
width	805	mm
length	1000	mm
heiaht	980	mm

robotcontrol	automated systematic operation	length 1000 mm height 980 mm	
sensors	laser, 3D vision, acceleration sensors, ultrasonic sensors		
user interface	access via on-board touch and smartphone or tablet		
Service Station (optional)	fully automatic for battery charging, clean water supply and pump out of the waste water		
Connectivity	over WiFi, you access operator information, control and fully automatic documentation		
scrubbing width / squeegee width	700 mm / 750 mm		
brush rotation velocity	45-120 rpm		
brush type	Standard adapter for all common brushes ar	d pads	
brush diameter	2 x 355 mm		
clean water capacity	60 l with fully automatic dosing during cleaning, fully automated refills at the Service Station		
waste water capacity	55 l with fully automatic draining at Service Station		
cleanser capacity	2 l with fully automatic dosing during cleaning		

## **PERFORMANCE**

cleaning time	3-5 h per battery charge depending on battery options and cleaning intensity
charging time	3-8 h depending on battery and charging unit option
cleaning speed	0,3-max. 0,8 m/s, continuously variable
cleaning area	750-1500 m² per hour per hour depending on surroundings and cleaning intensity
Application example	With an average operation of 4 hours, the CR700 can clean approximately 4.000-5.000 m² per battery charge. Per day, including recharge of the battery, 8.000-10.000 m² are possible.

370 mm

# **FULLY AUTOMATED SERVICE STATION S700**











#### **TECHNICAL INFORMATION**

Water connection The connection is secured with an aquastop which can block the water inlet.

230 Volt socket Power connection

Fully automated service operation With the service station there is no need for manually filling the clean water

tank or emptying the waste water into a drain. In addition without splashes or

spill accidents, saving time and annoyance.

Status - Signal line The signal line of the service station controles and checks if the battery power is

loading, the clean water filling and waste water emptying are completed and if

the robot is ready for the next shift.

On our website: More information

https://www.adlatus.eu/en/videos/



Loading

Clean Water

**Dirty Water** 





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