



# eCleango 550

Sweeper



A fully electric, compact and robust sweeper for everyday cleaning operations in urban areas. The redesigned state-of-the-art cab provides a spacious, clear and convenient workplace offering maximum comfort. The operating system is designed logically to enable intuitive operation.

## Highlights

- **100% electric: Battery capacity of 100 kWh and optionally 150 kWh**
- **100% performance:** high performance and driving power even in the most demanding sweeping tasks – no compromises compared to the diesel engine model
- Working time of up to **10 hours without recharging**
- Compact hopper with a capacity of **5.5 m<sup>3</sup>** integrated in the vehicle
- Available as a **2- or 3-brush system** with towed suction shaft

## Your benefits

- **No emissions:** reduce CO<sub>2</sub> emissions while saving money
- **Extremely quiet driving and operation:** the machine is particularly suitable for working at night or early in the morning
- **Unique workplace:** spacious cab with (adjustable) air suspension driver's seat with controls that can be accessed with one hand. AGR-tested ('Campaign for Healthier Backs') and recommended
- **Excellent visibility:** convex rear window enables an **almost 250° view**
- **Low wear:** the **towed system minimises damage from collisions** and thus reduces brush wear

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## Performance features

### Electric drive

The eCleango 550 boasts a fully electric drive. The centrepiece of the drive is the high-voltage battery with a capacity of 100 kWh and optionally 150 kWh. The modular high-voltage battery system is made up of four or six independent battery packs. The individual battery packs are connected in parallel via a central power distribution unit (PDU). The powerful energy storage units allow operating times of up to 10 hours without recharging (depending on the application).

High-quality components guarantee a long service life and a high level of safety for the user and the machine. The drives of all main consumers – travel drive, fan drive, hydraulic pump drive and air conditioning system in the cab – have been electrified. The electric drive is superior to a drive using combustion engines in many ways, including higher efficiency, optimum power characteristics and high performance with low maintenance requirements.

A specially developed electric rear axle has been designed for the travel drive. The maximum torque of 350 Nm is transmitted to the rear wheels via a single-speed transmission. The electric motor's 140 kW maximum output enables driving speeds of up to 50 km/h and gradeability of up to 30%. The noise level is considerably lower than that of the diesel vehicle. An electric parking brake system with hill-start assist guarantees safe and comfortable driving. The electric multi-circuit hydraulics are supplied by several silent pumps, making them very efficient and quiet. The standard on-board charger (OBC) with a charging power of 22 kW/AC enables the sweeper to be fully charged safely overnight. The integrated combined charging system (CCS) ensures that the battery can be fully recharged in around one hour (80% SOC). This means that even unplanned operations can be completed without any problems. The innovative thermal management system and intelligent cooling and thermal management further increase the longevity of the battery packs and thus their practical appeal and suitability for everyday use.

### Sweeping technology

The eCleango 550 is available as a 2- or 3-brush system and features a towed disc brush system mounted in front of the front axle. Compared to a shunted system, the towed design ensures significantly less collision damage and considerably reduced wear on the brushes.

The 2-brush variant has a sweeping width of 2,200 mm. With the optional third brush, the span swept can be as wide as 3,550 mm. This allows for better coverage rates (up to 66,000 m<sup>2</sup>/h), sweeping on two levels and efficient sweeping of surfaces with a large amount of street furniture, which therefore have to be worked in small sections. The reinforced arm carrying the front brush can be used on both the left and right of the machine and can also carry out heavy-duty weed-removal.

All functions of the eCleango 550 can be controlled hydraulically on the control panel in the driver's cab. The entire sweeping unit can be hydraulically shifted 300 mm to each side. With the optional autonomous brush control system, the angle of the disc brushes can be hydraulically adjusted to the road conditions from the driver's cab. Ground pressure on each disc brush can also be adjusted individually from the driver's cab. This enables convenient and thorough sweeping of right-angled corners, gutters and hard-to-reach areas.



### Suction and water systems

The towed suction shaft is mounted behind the brush and in front of the front axle, and is carried on casters at a constant height above the ground. The suction shaft and disc brushes form a single unit. Suspending the brush unit guarantees optimum tracking and thus coverage to the suction shaft. The flow-optimised suction shaft ensures the sweeping performance remains just as effective even at low fan speeds and with reduced fuel consumption. A hydraulically actuated cover for bulky debris allows even larger items to be swept away. The fan speed can be easily adjusted to almost any level to allow for a fast response to changing conditions.

The fresh water system has a capacity of 750 l. The powerful water pump supplies two spray nozzles in each disc brush and the nozzles in the suction shaft. The collected debris is combined with water and compacted to help ensure that only clean air with low particulate levels are released.



## Comfort

This suspension package is calibrated for the eCleango sweeper to make driving this machine just as safe and comfortable as a car. It is the perfect combination of good driving comfort, robustness and low maintenance requirements. The high load capacity and large wheel contact area guarantee greater safety with low ground pressure – regardless of road and weather conditions.

The wide steering angle of 68° combined with the short 2,000 mm wheelbase provides for optimal manoeuvrability with an impressively small turning circle.

The optional lockable differential on the rear axis makes the eCleango 550 the ideal partner even for challenging terrain.

## Workplace

The design of the cab focuses on operational comfort and ergonomics. The windscreen extends completely to the cab floor to offer optimal visibility from inside the spacious cab. A special highlight is the new convex rear windows in the rear edge of the cab, which provide an unparalleled field of view of almost 250°. Two large wing mirrors additionally offer a perfect view of the working area and surroundings. An observation window in the cab floor provides an unobstructed view of the suction shaft and the disc brushes.

The cabin is equipped with high-quality sound-proofing and vibration damping. This allows the driver to focus even more effectively and perform their tasks efficiently and safely. The powerful thermal management system also ensures the best possible interior climate while working. The angle of the steering column can be adjusted and the cab can optionally be equipped with three seats.

All controls – including the joystick for the front and side brushes – are within easy reach from the air suspension driver's seat and can be operated with one hand. A modern design and touchscreen display make the user interface truly unique. The ability to store different driver profiles also adds further value for users. The keypad with integrated LED lighting, which is mounted directly in front of the joystick, displays the key functions of the machine. In the two control panels, the operator selects, for example, which work mode they wish to work in or whether to activate the brush pressure setting.

The multimedia player can be selected as an option, and offers high-quality entertainment and hassle-free smartphone connectivity. Apple CarPlay or Android Auto, for example, can be controlled conveniently and safely via the touch display. Everything from DAB/DAB+ digital radio to audio and video content on USB devices can be played. The multimedia player also features Bluetooth, allowing the driver to make calls safely via the hands-free system.



## Hopper

The new eCleango 550 has a hopper capacity of 5.5 m<sup>3</sup>. This is 10% larger than the predecessor model. The larger system volume sets new standards in terms of performance and range. The eCleango 550 guarantees maximum sweeping performance with an extended operating radius. The basic model features a low dump. A high-dump system with slide gate for emptying into containers is available as an option. The integrated scissor lift simultaneously moves the container upwards and closer to the container. This design ensures clean and safe emptying for the driver. The hydraulically locked rear flap with a robust rubber seal creates a watertight seal between the rear flap and the container. The new exhaust air system makes it easy and convenient to switch the exhaust air depending on the sweeping conditions.

## Modern vehicle technology

The entire vehicle frame and all important components are hot-dip galvanised to ensure outstanding corrosion protection and long-term use in all weather conditions.

A generously proportioned water tank with a volume of 750 litres enables long operating times. The tank is also mounted on the chassis to create a lower centre of gravity for better road handling.

The optional high-pressure pump with a delivery rate of up to 15 l/min and up to 150 bar supplies a 20-metre hose reel with manual spray gun, which is integrated into the vehicle.

In addition to efficient sweeping, the issue of safety is also important. For this reason, the eCleango 550 can be optionally equipped with a 360° camera to provide a good view of the machine and its surroundings in every transport and work situation.

The redesigned lighting concept features LED daytime running lights and LED working headlights that optimally illuminate the entire working area.

## Wide range of options

- Large battery pack with 150 kWh
- Three front brushes
- Weed brush
- Reversing and suction shaft camera
- High-pressure cleaner
- Air suspension driver's seat
- 3rd seat (additional passenger seat)
- Multimedia player with smartphone connection

## IntelliOPS telematics platform

The eCleango 550 can be connected to the Aebi Schmidt IntelliOPS platform. The IntelliOPS telematics platform provides comprehensive monitoring, selection, reporting and analysis functions. It enables quick performance evaluation by displaying live machine activity data on a map and facilitates the use of the collected data by providing detailed overviews and reports to optimise the work process.

If you want to monitor, plan, control in real time, optimise or, for example, bill third parties for the activities of your eCleango 550, then use the digital solutions on our IntelliOPS platform. IntelliOPS supports you in the efficient use of your individual machine as well as in a network with several machines, including those of other brands. Here you can find out more about our digital solutions and how you can use them in a way that is modular and adapted to your needs.

## Variants

eCleango 550 | 2-brush system



eCleango 550 | 3-brush system



## Variants

A flexible sweeping system helps ensure thorough cleaning in any situation. The towed disc brush system, mounted in front of the front axle, achieves a sweeping width of 2,200 mm.

With the optional third brush, the span swept can be as wide as 3,550 mm. This allows a larger area to be covered as well as sweeping on two levels.

## Keywords

#Counties, Cities & Municipalities #Contractors #Industry, Construction & Facility Management #Airports #Cleaning & Washing #Sweeping #Innercity Roads #Parking Facilities & Underground Car Parks #Industrial & Port Areas #Airport Landside



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## Technical data

	eCleango 550   2-brush system	eCleango 550   3-brush system
<b>Hopper</b>		
Tank volume	5.5 m <sup>3</sup>	5.5 m <sup>3</sup>
Tilt angle	50°	50°
Dumping height high discharge	1,100 - 1,820 mm	1,100 - 1,820 mm
<b>Water system</b>		
Fresh water volume	750 l	750 l
<b>Battery</b>		
Total capacity	100 kWh / 400 V (Option: 150 kWh / 400 V)	100 kWh / 400 V (Option: 150 kWh / 400 V)
<b>Electric motors</b>		
Torque traction drive (rear axle)	135 - 350 Nm	135 - 350 Nm
Power traction drive (rear axle)	140 kW	140 kW
<b>Steering</b>		
Steering angle front axle	68°	68°
<b>Speed</b>		
Transport speed	25/30/40/45/50 km/h	25/30/40/45/50 km/h
Sweeping speed permanent use	12 km/h / Option: 18 km/h	12 km/h / Option: 18 km/h
<b>Dimensions</b>		
Length without 3rd brush	4,650 mm	4,650 mm
Length with 3rd brush	5,750 mm	5,750 mm
Width without brush	1,810 mm	1,810 mm
Width with brush	2,050 mm	2,050 mm
Height with beacon	2,649 mm	2,649 mm
Wheelbase	2,000 mm	2,000 mm
Track width front	1,620 mm	1,620 mm
Track width rear	1,310 mm	1,310 mm
<b>Weights</b>		
Empty weight of the basic unit approx.	6,200 kg	6,200 kg
Payload	5,300 kg	5,300 kg



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