



# Mirka® AIROS

– the first smart sander for industrial robots

The Mirka Automated Industrial Random Orbital Sander, Mirka AIROS is an industry first. It is an electric smart sander for industrial robots, built inside a sturdy yet light aluminium housing, featuring an ISO 9409-1 compatible flange for mechanical robot coupling. It can be adapted to fit all mechanical couplings, offering maximum flexibility. The long-life, brushless 48V motor on the AIROS is extra safe for wet sanding, and it runs on constant, configurable RPM.

## 1 EASY TO INTEGRATE

Mirka® AIROS is light electric sander that is easy to integrate, requiring lower weight handling capacity and saving electricity compared to traditional pneumatic options. Mirka® AIROS is specifically designed for robotic sanding application and build for continuous usage in robotic environment. Mirka® AIROS has standardized connections ensuring faster and easier installation and maintenance, leading less downtime and improved productivity. Mirka® AIROS is equipped with custom flanges for most robot types to offer maximum flexibility by enabling all mechanical couplings from standard ISO to be customised by means of an adapter.

## 3 MIRKA ECOSYSTEM

Mirka® AIROS is part of the Mirka ecosystem making it the most dependable solution in the market. Mirka solutions consist of sanding heads, controller unit, abrasives (including custom designed for specific requirements) and naturally knowledge and support of true finishing professional through the whole process. Since Mirka® AIROS sanding head is separate from controller unit, parts are easy to replace decreasing downtime and costs.

## 2 SMART SANDING SOLUTION WITH EXACT RPM MANAGEMENT

Mirka® AIROS has build-in intelligence that allows two way communication between Mirka® AIROS and control system. Full live control of sanding process ensures the consistent quality and enables controller to learn about application and even improve the quality based on logged data. Additionally smart electric sanding solution enables full control over RPM that can be configured according the needs of different phases of process. Content RPM ensures the consistent quality level that is always reproducible even under higher loads.

## 4 DUST & WATER PROOF ELECTRIC SANDER

Mirka® AIROS is IP66 classified electric sander suitable for all sanding applications, even wet sanding and safe usage on hazardous materials. Dust and waterproof design of Mirka® AIROS combined with rigid and robust an aluminium housing ensure longer lifetime and safer operations. No lubrication oil needed.



## Specifications

The control electronics are separate from the tool and can be installed in a cabinet or other enclosure. The electronics include:

- Circuit board with speed controller and relay
- 48 VDC power supply compatible with 90 – 264 VAC
- Modbus RTU port for RS-485 serial communication  
Profinet - Modbus gateway (optional)

Technical Data	Mirka® AIROS 350 CV/NV*	Mirka® AIROS 550 CV/NV*	Mirka® AIROS 650 CV/NV*
<b>Power</b>	350 W	350 W	350 W
<b>Input voltage</b>	90 – 264 VAC	90 – 264 VAC	90 – 264 VAC
<b>DC voltage to sander</b>	48 VDC	48 VDC	48 VDC
<b>Speed</b>	4,000 – 10,000 rpm	4,000 – 10,000 rpm	4,000 – 10,000 rpm
<b>Orbit</b>	5.0 mm	5.0 mm	5.0 mm
<b>Weight</b>	1.1 kg	1.3 kg	1.3 kg
<b>Height</b>	113 mm	113 mm	113 mm
<b>Size of pad</b>	77 mm (3")	125 mm (5")	150 mm (6")
<b>Ambient operating temperature</b>	0 – 45 °C	0 – 45 °C	0 – 45 °C
<b>Vacuum hose</b>	Ø 27 mm	Ø 27 mm	Ø 27 mm
<b>Communication Interfaces</b>	Modbus RTU RS-485 included Profinet - Modbus gateway optional Other alternatives available	Modbus RTU RS-485 included Profinet - Modbus gateway optional Other alternatives available	Modbus RTU RS-485 included Profinet - Modbus gateway optional Other alternatives available

\* Central Vacuum / Non Vacuum

For more information please visit [www.mirka.com](http://www.mirka.com) and check our videos on the Mirka YouTube channel

Mirka Ltd Finland

Dedicated to the finish.