

UPM/EC PCO

MOBILE AIR PURIFICATION UNITS WITH PHOTOCATALYSIS TECHNOLOGY



- NEGATIVE IONISATION
- EC TECHNOLOGY MOTOR
- 3 STAGES OF FILTRATION
- AUTOMATIC REGULATION AND CONTROL
- THERMAL AND ACOUSTIC INSULATION
- EASY ACCESS FOR MAINTENANCE



PHOTOCATALYSIS











UPM/EC PCO

UPM/EC PCO air purification units are designed for disinfecting, cleaning, eliminating odours and purifying air in high occupancy areas where there are stringent soundproofing and versatility requirements.



ACTIVE DISINFECTING TECHNOLOGY

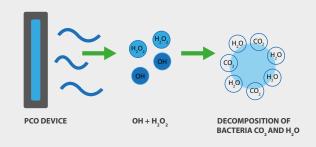
PCO™ technology (Photocatalytic Oxidation) is a powerful tool that is used for purifying air and nearby surfaces by accelerating the natural decomposition of organic matter through photocatalysis.

In addition, our equipment has built-in modules with **positive and negative ionisation technology** to improve their effectiveness against ultrafine dust and odours.

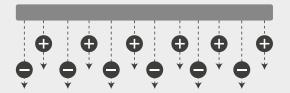
HOW DOES IT WORK?

PCO technology uses a UVc ultraviolet light source to react with a titanium dioxide catalyst in the presence of humidity/water vapour to create small quantities (0.02 PPM) of hydroxyl radicals (OH) and hydrogen peroxide (H₂O₂), which inactivate airborne microorganisms and harmful chemical substances circulating in CO₂ and H₂O.

These devices use PCO technology, together with **positive and negative ionisation**, to gather suspended particulate matter, which has not been collected by filters, and make it harmless.



Positive and negative ionisation of particles





Purifying air by disinfecting it using **PCO technology** is ideal for premises where people are continuously entering and exiting. These premises require a speedy, high efficiency disinfection due to the high rate of pollutants that may be circulating.

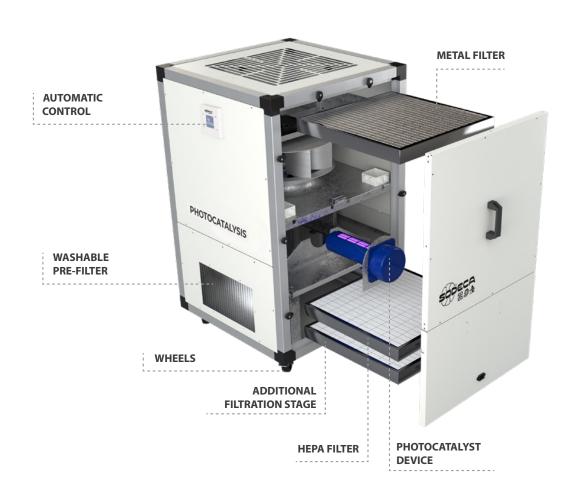
PCO technology is also suitable for use at locations where there is a need to disinfect large material surfaces through the air.

APPLICATIONS

- Hospitals
- Waiting rooms
- Food industry
- Clean rooms
- Businesses
- Libraries
- Offices

BENEFITS

- Eliminates germs, viruses, mould and bacteria
- Does not pollute
- Reduces odours
- Helps alleviate allergies and control asthma
- Effective against all organic pollutants
- Eliminates ultra-fine dust and animal hair







ENERGY SAVING

Diffusers in the inlet panel prevent the air flow from swirling, which together with a dynamic pressure balance chamber, increase the unit's performance. The EC Technology type electric motor and the built-in PCO device are both highly efficient units and are essential for reducing the electrical consumption.





LOW NOISE LEVEL

The 25 mm acoustic casing is made of high-quality insulating material and, together with the EC Technology motor, ensures that this unit operates at low noise levels.



DURABILITY

These units are made from prefinished sheet metal and aluminium sections, providing them with excellent corrosion resistance, increasing their service life.



PHOTOCATALYST DEVICE

Device with PCO technology and ambient air positive and negative ionisation technology. Designed to improve indoor air quality as well as disinfecting air and nearby surfaces to eliminate germs, viruses and bacteria.



WASHABLE PRE-FILTERS

These filters can be continuously reused requiring minimum maintenance.



EASY TO INSTALL AND MAINTAIN

The inside of the unit can be quickly accessed through the inspection panel for cleaning and for filter replacement or to use the UVc ultraviolet light if required.



AUTOMATIC CONTROL SYSTEM

Allows programming the unit, turning off and on and adjusting the flow.



PRODUCTS WITH CERTIFIED PCO TECHNOLOGY THAT ARE 100% EFFECTIVE IN 10 MINUTES AGAINST MENGOVIRUS

The effectiveness of PCO technology has been proven in a laboratory certified by ENAC and APPLUS+ in accordance with standard EN 14476 for the evaluation of virucidal activity in the medical area for antiseptic and disinfectant tests.

Mengovirus is a microorganism of the same family as the SARS-CoV-2, which causes COVID-19.









UPM/EC PCO





Mobile air purification units with technology based on photocatalysis, designed for disinfecting and purifying indoor air and surfaces in any type of high occupancy premise



Characteristics:

- 40 mm aluminium profile structure.
- Wheels kit.
- Plug&Play system with built-in control.
- Dirty filter monitoring and alarm.
- Covers with a high quality, 25 mm thick acoustic casing made of prefinished sheet.
- Impeller with backward curved blades.
- Washable pre-filter.
- Built-in photocatalyst device with negative ionisation.
- Additional filtration stages: F7 + HEPA H14.
- Inspection cover for maintenance and filter replacement.

Motor:

- High efficiency EC technology motors,
- adjustable via 0-10 V signal.
- Single-phase 200-240 V 50/60 Hz and three-phase 380-480 V 50/60 Hz.
- Carried air temperature range: -25 °C to +60 °C.

Finish:

Aluminium profile and prefinished sheet steel structure with 25 mm thick thermal and acoustic insulation panels.

On request:

Particle sensor for automatic monitoring. (PM2,5+VOC or CO2+VOC).

Order code



UPM/EC PCO: Mobile air purification units with technology based on photocatalysis, designed for disinfecting and purifying indoor air and surfaces in any type of high occupancy premise.

Impeller diameter in mm

Characteristics of the filters

STANDARD FILTERS

		_	ISO 16890				
	EN 779	EN 1822	ISO ePM ₁	ISO ePM _{2.5}	ISO ePM ₁₀	ISO COARSE	
F7	90%	-	>50%	>65%	>85%	-	
H14	-	>99.995%	-	-	-	-	

Technical characteristics

Model	Recommended working surface area* (m²)	Speed (r/min)	Power (W)	Power supply	Sound pressure level at 50% of max. speed.**	Maximum flow rate (m³/h)	Approx. weight (kg)
UPM/EC PCO-310	100	2377	450	200-240 V 50/60 Hz 1 Ph	55	800	56
UPM/EC PCO-400	160	1550	460	200-240 V 50/60 Hz 1 Ph	47	1300	98
UPM/EC PCO-500	240	1250	1150	380-480 V 50/60 Hz 3 Ph	51	1950	166

^{*} Recommended surface area with a 3m ceiling height.
** Irradiated sound pressure level in dB(A) at a distance of 3m.



Erp. (Energy Related Products)

 $Information \ on \ Directive \ 2009/125/EC \ can \ be \ downloaded \ from \ the \ SODECA \ website \ or \ the \ QuickFan \ selector \ programme.$

Dimensions mm



Model	Α	В	Н
UPM/EC PCO-310	542	500	960
UPM/EC PCO-400	742	700	1210
UPM/EC PCO-500	942	900	1550





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