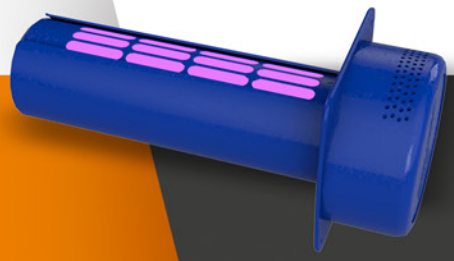
CERTIFIED TECHNOLOGY
100% EFFECTIVE
ACCORDING TO
EN 14476 STANDARD

UPM/EC PCO

MOBILE AIR PURIFICATION UNITS WITH PHOTOCATALYSIS TECHNOLOGY



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

SODECA®

EC TECHNOLOGY

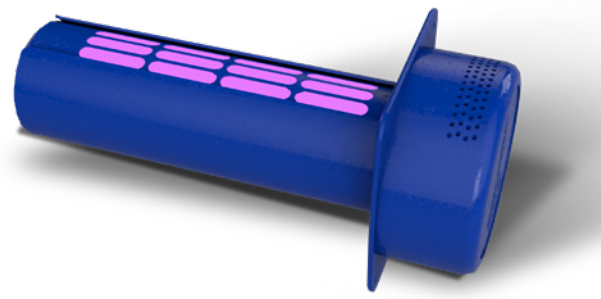
CE ACCORDING ErP

PHOTOCATALYSIS

FILTRATION STAGES G2 + F7 + HEPA H14

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

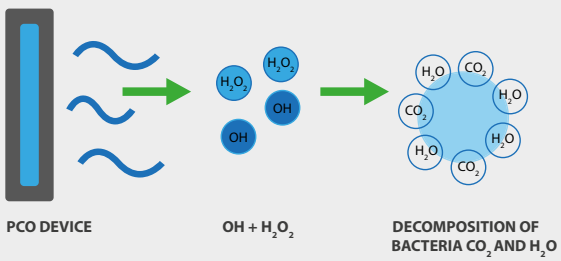
PCO™ technology (Photocatalytic Oxidation) is a powerful tool that is used for purifying air and nearby surfaces by accelerating the natural decomposition of organic matter through photocatalysis.

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

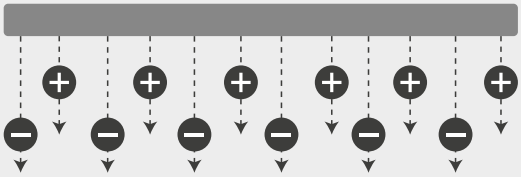
HOW DOES IT WORK?

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 (H_2O_2), which inactivate airborne microorganisms and harmful chemical substances circulating in CO_2 and H_2O.

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.

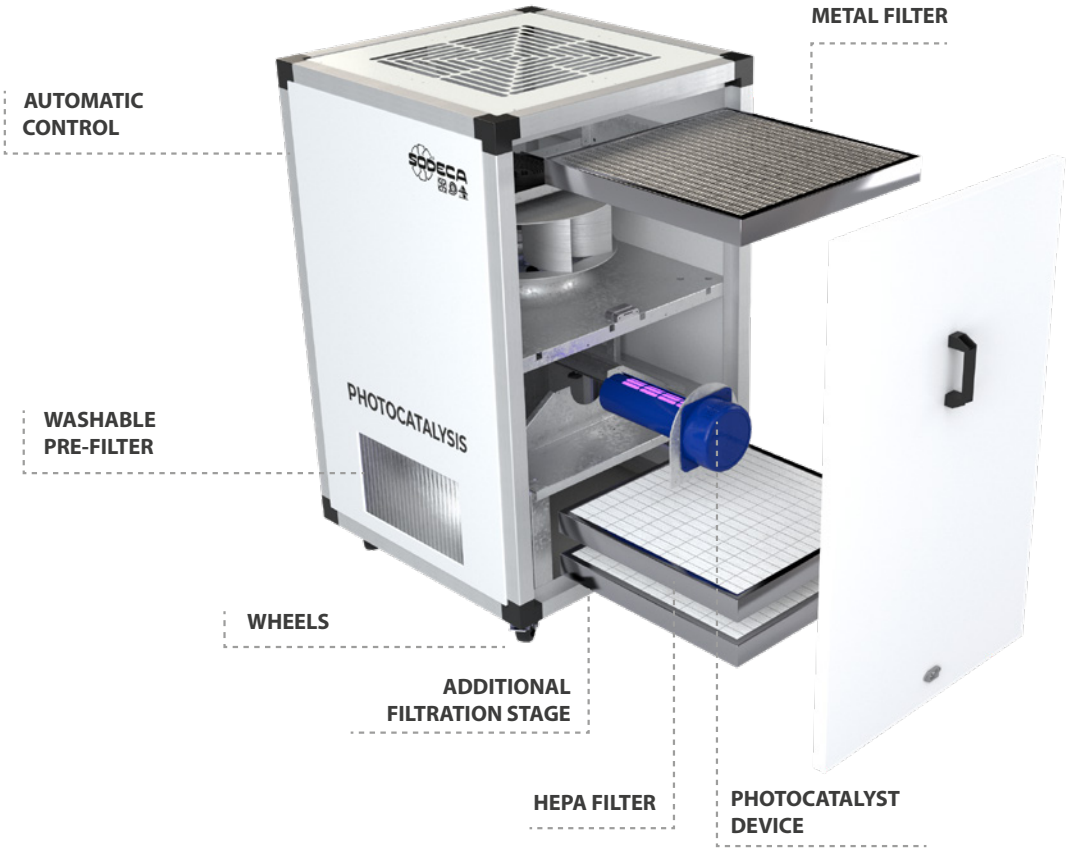
PCO technology is also suitable for use at locations where there is a need to disinfect large material surfaces through the air.

APPLICATIONS

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

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

The pre-lacquered and anodized aluminium profiles finish provide higher corrosion resistance, extending product lifetime.

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 purifying units with photocatalysis-based technology

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.
- Wheel kit.
- Plug & Play system with integrated control.
- Adjustable filter change alarm.
- Covers with a high quality, 25 mm thick acoustic casing made of prefinished sheet.
- Backward curved impeller.
- Washable pre-filter.
- Built-in photocatalyst device with negative ionisation.
- Additional filtration stages: F7 + HEPA H14.
- Inspection cover for filter maintenance and replacement.

Motor:
- High efficiency EC Technology motors, outer rotor adjustable via 0-10 V signal.
- Single-phase 200-240 V 50/60 Hz and three-phase 380-480 V 50/60 Hz.
- Maximum temperature of air to be carried: -25 °C +60 °C.

Finish:
- Structure of anodised aluminium profiles and pre-lacquered sheet metal with 25 mm thermal and acoustic insulation panels.

On request:
- Particulate matter sensor for automatic control SI-PM2.5+VOC or SI-CO2+VOC.

Order code

UPM/EC PCO — 310

UPM/EC PCO: Mobile air purifying units with photocatalysis-based technology

Impeller diameter in mm

Filter characteristics

STANDARD FILTERS	EN 779	EN 1822	ISO 16890			
	Em		ISO ePM_1	ISO $ePM_{2,5}$	ISO ePM_{10}	ISO COARSE
F7	90%	-	>50%	>65%	>85%	-
H14	-	>99.995%	-	-	-	-

Technical characteristics

Model	Recommended effective working area[1]	Speed	Power	Power supply	Sound pressure level at 50% of max speed.[2]	Maximum flow rate	Approx. weight
	(m^2)	(r/min)	(W)		dB (A)	(m^3/h)	(Kg)
UPM/EC PCO-310	100	2377	450	200-240V 50/60Hz 1Ph	55	800	56
UPM/EC PCO-400	160	1550	460	200-240V 50/60Hz 1Ph	47	1300	98
UPM/EC PCO-500	240	1250	1150	380-480V 50/60Hz 3Ph	51	1950	166

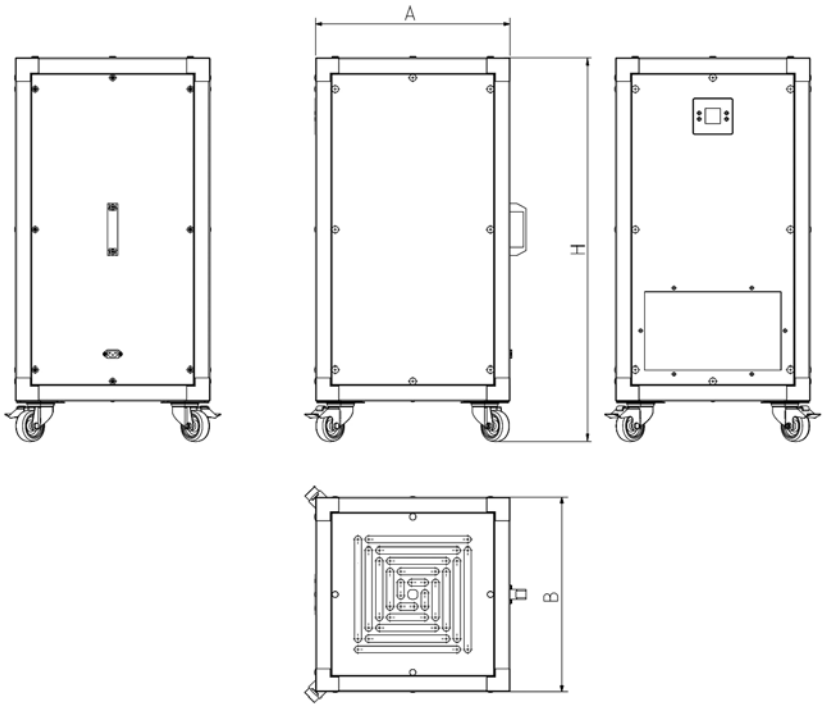
[1]Recommended effective working area with a 3-meter-high premises.

[2] Irradiated sound pressure level in dB(A) at a distance of 3 m.

Erp. (Energy Related Products)

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

Dimensions mm



	A	B	H
UPM/EC PCO-310	500	500	985
UPM/EC PCO-400	701	701	1186
UPM/EC PCO-500	901	901	1386

03/2022

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