AIR PURIFIERS AND VENTILATION UNITS TO IMPROVE AIR QUALITY IN PUBLIC SPACES AND COMMERCIAL ESTABLISHMENTS HIGH EFFICIENCY FILTERING SOLUTIONS (HEPA), CAPABLE OF TRAPPING VIRUSES AND BACTERIA OPTIMAL LEVELS OF INDOOR AIR QUALITY



## STOP IT!

Air purifiers and ventilation units

## **Indoor Air Quality**

Proper ventilation is the key to high quality indoor air.

And the search for excellence in indoor air quality has been Soler&Palau's mission since 1951.

Recent events have made indoor air quality (IAQ) one of the most trending topics, highlighting the connection between indoor air quality and the well-being of the occupants of buildings.

We spend more time inside buildings than outside, with jobs and lifestyles that force us to spend more than 80% of our time indoors.

Exposure in these environments to air contaminants—from dust to spores, bacteria or viruses, as well as the chemical compounds released by paint, claddings and furniture—has a direct impact on our immune systems and can cause anything from mild discomfort in our respiratory systems (for example, irritation and dryness) to much more serious health problems such as allergies, especially when the exposure to the contaminants is prolonged.

It has been proven that poor IAQ encourages the transmission of infectious diseases.

Maintaining optimal indoor air quality has become a priority. A highly important priority during this pandemic situation. Having equipment and systems that can decrease the virus load and reduce the possibility of infections is especially important.

And it is in this search for excellence in indoor air quality where Soler&Palau continues to work and provide solutions.

### What is the solution to improve indoor air quality (IAQ)?

- Stand-alone air purification equipment that traps contaminants in the indoor air, turning spaces into comfortable and healthy places.
- **Ventilation systems** that reduce the concentration of contaminants in the indoor air, replacing it with filtered outdoor air.

Indoor air quality (IAQ) in buildings (hotels, clinics, offices, factories, shopping areas, schools, etc.) is directly related to people's health, productivity and comfort.





Simple to operate, the purifiers have a multi-level filtering system that, with a suitable combination of filtering actives, removes contaminants from the air in the places where they are located.

The air purifier option is ideal for premises or buildings that do not have adequate ventilation systems, or companies with facilities or spaces that lack advanced ventilation systems. This type of purifying equipment is also suitable as a ventilation accessory in the elimination of specific contaminants, including viruses and bacteria.

The dirty air, laden with pollutants and odours, is sucked in by the equipment and, after circulating through the different filter stages, clean of contaminants, is returned to the interior of the premises. The continuous air recirculation process allows for a constant improvement in air quality, which solves the problems caused by poor indoor air quality.





### PAP 850 / PAP 650

Portable air purifiers

### **Applications**

Air purification in commercial applications, including:
Offices
Commercial establishments
Meeting rooms
Kindergarten
Hotels



Veterinary clinics Laboratories

Data centres

Rack cupboards where electronic devices are stored

Offices undergoing production processes Premises and closed areas for painting, cutting, polishing or welding work





Model Horizontal	Vertical	Filters	Filtration capacity
PAP 850 H14	PAP 850V H14	F7+H14	Dust, pollen, spores, bacteria, viruses, Fine particles in suspension $[PM_{1}, PM_{2.5} y PM_{10}]$
PAP 650 CA H14	PAP 650V CA H14	F7 + active carbon + H14	Dust, pollen, spores, bacteria, viruses, fine particles in suspension $[PM_1, PM_{2.5} y PM_{10}] + odours$
PAP 650 VOC H14	PAP 650V VOC H14	F7 + Filtro VOC + H14	Dust, pollen, spores, bacteria, viruses, fine particles in suspension (PM1, PM2.5 y PM10) + odours + formaldehyde, ethylene, CO, SO <sub>3</sub> , NO <sub>2</sub> , VOC

Model Horizontal Vertical		Clean filter flow rate (m³/h)	Dirty filter flow rate (m³/h)	Area treat (m²)		Sound level at maximum speed (dB)	Power supply	Power (W)	Maximum current absorbed (A)
PAP-850 H14	PAP 850V H14	850	600	80	60	50	230V 50-60Hz	180	1,2
PAP 650 CA H14	PAP 650V CA H14	650	450	60	45	49	230V, 50-60Hz	178	1,1
PAP 650 VOC H14	PAP 650V VOC H14	650	450	60	45	49	230V 50-60Hz	178	1,1

<sup>\*</sup>For commercial premises with a height of 3 m.

Models		Width (mm)	Length (mm)	Height (mm)	Weight (kg)
Vertical	PAP 850 / PAP 650	550	520	820	50
Horizontal	PAP 850 / PAP 650	550	735	605	50



### PAP 420 / PAP 350

Portable air purifiers

### **Applications**

Air purification in commercial applications, including:

Offices

Commercial establishments

Meeting rooms Kindergarten

Hotels

Hospitals

Nursing homes

Showrooms Veterinary clinics

Laboratories



Model	Filters	Filtration capacity
PAP 420 H 14P	F7 + H14	Dust, pollen, spores, bacteria, viruses, fine particles in suspension (PM $_{1}$ , PM $_{2.5}$ and PM $_{10}$ )
PAP 350 CA H14	F7 + active carbon + H14	Dust, pollen, spores, bacteria, viruses, fine particles in suspension $(PM_1, PM_{25} \text{ and } PM_{10}) + \text{odours}$
PAP 350 VOC H14	F7 + VOC Filter + H14	Dust, pollen, spores, bacteria, viruses, fine particles in suspension (PM $_1$ , Pm $_{2.5}$ and PM $_{10}$ ) + odours + formaldehyde, ethylene, CO, SO $_2$ , NO $_3$ and VOC

Model	Clean filter flow rate (m³/h)	Dirty filter flow rate (m³/h)	Area t		Sound level at maximum speed (dB)	Power supply	Power (W)	Maximum current absorbed (A)
PAP 420 H14	420	300	40	30	53	230V 50-60Hz	98	0,7
PAP 350 CA H14	350	290	36	27	52	230V 50-60Hz	98	0,7
PAP 350 VOC H14	350	290	36	27	52	230V 50-60Hz	98	0,7

<sup>\*</sup>Based on commercial premises with a ceiling height of 3 m.

Model	Width (mm)	Length (mm)	Height (mm)	Weight (mm)
PAP 420 /350	380	350	708	33



### AIRPUR 360°

Column-type portable residential air purifier.

For rooms of up to 50 m<sup>2</sup> with flow rate of 450 m<sup>3</sup>/h.

Its ring design enables the air to be sucked in 360°, which increases its efficiency and its filtration performance.

It incorporates a high-performance, very quiet DC Brushless motor.

Level of filter efficiency of 99.99%.

Digital touch screen control panel.

PM numerical indicator of room air quality  $(\mu q/m^3)$ .

Indicator of room air quality.

Numerical indicator of relative humidity and room temperature.

Filter change warning light.

Four operating modes.

UV function.

Auto-disconnection at the filter access opening, anti-tip auto-disconnection and lock mode for child protection.

### 360° drum type filter, with three stages filtration:

**Large particle pre-filtering** (filter class F7 / EN 779).

Traps and filters large particles, such as dust and other suspended particles (PM10).

#### Fine particle filtering

(class H13 HEPA filter / EN 1822). Using a high-density HEPA antimicrobial filter, it filters all fine particles (diameter 2.5  $\mu$ m), such as pollen and fibres [PM2.5].

### Filtering of volatile organic compounds and bad odours

Using an active carbon filter with a honeycomb structure, the most volatile harmful substances, along with bad odours (fumes), are filtered.



Air Quaility color legend

0-50µm Perfect m 100-1

>150um



Model	Filters	Filtration capacity	Diameter	Height
AIRPUR 360°	F7 + H13 + active carbon	Dust, pollen, spores, bacteria, viruses, Fine particles in suspension ( $PM_{25}$ y $PM_{10}$ ) + Odours	300 mm	708 mm



### **AIRPUR N**

Mounted residential air purifier. For rooms of up to 25 m2 Guarantees a minimum of three air renewals per hour

#### Filters the air in four stages:

- **1.** The fibre pre-filter traps the largest particles.
- **2.** The EPA Class E11[EN 1822-1] traps particles of up to 0.1 microns, such as pollen, with 98.5% efficiency.
- **3.** The activated carbon filter eliminates fumes and odours.
- **4.** The ioniser provides the ideal balance between positive and negative ions in the environment, making the atmosphere feel fresh and relaxing.

**Touch control panel** with indicators for speed, filter saturation, ioniser and 2-4-8 h. timer.

Class II



Model	Voltage 50Hz (V)	Maximum power (W)	Maximum current absorbed (A)	Speeds	Maximum volume of air filtered (m³/h)	loniser (ions/cm³)	Sound level pressure at 1.5m (db(A))	Colour	Weight (kg)	Dimensions LxHxW (mm)	
AIRPUR-N	230	60	0.15	4	200	3 millones	51.5 / 46.5 / 38.5 / 31.5	White RAL 9003	4.7	370x204x394	



### UP

Air purification units for commercial applications

### Wall- or ceiling-mounted installation

#### Commercial applications

Offices
Commercial establishments
Meeting rooms
Kindergarten
Hotels
Hospitals
Nursing homes
Showrooms
Veterinary clinics

Laboratories

### Industrial applications

Data centres Rack cupboards where electronic devices are stored

Offices undergoing production processes Premises and closed areas, intended for painting, cutting, polishing or welding work





	Filters	Filtration capacity
UP series	G4 + F7 + H14	Dust, pollen, spores, bacteria, viruses, fine particles in suspension ( $PM_1$ , $PM_{2.5}$ y $PM_{10}$ )

Model	Nominal flow rate (m³/h)	Static pressure clean filters available (Pa)	Area to treat* (m²)	Power supply	Power (kW)	Maximum current absorbed (A)
UP-1200 H14	1.200	245	100 - 133	1F/230V, 50-60Hz	0,46	2
UP-2300 H14	2.300	310	192 - 256	1F/230V, 50-60Hz	0,9	4
UP-3600 H14	3.600	360	300 - 400	1F/230V, 50-60Hz	1,7	7,6
UP-5200 H14	5.200	300	433 - 578	3+N/400V, 50-60Hz	2	3,8

<sup>\*</sup>For commercial premises with height of 3 m  $\,$ 



### UP

Air purification units for commercial applications

### Wall- or ceiling-mounted installation

The design of the product is perfect for installing purifiers in vertical furnishings in commercial establishments and offices.



Models	Width (mm)	Depth (mm)	Height (mm)
UP-1200 H14	750	360	2.220
UP-2300 H14	1.100	410	2.320
UP-3600 H14	1.500	410	2.300
UP-5200 H14	1.900	500	2.300

Models	Width (mm)	Depth (mm)	Height (mm)
UP-1200 H14	750	360	1.860
UP-2300 H14	1.100	410	1.910
UP-3600 H14	1.500	410	1.910
UP-5200 H14	1.900	500	1.910

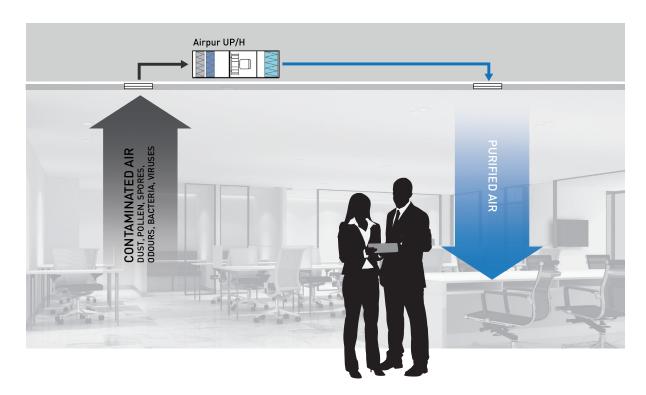


### UP

Air purification units for commercial applications

### Horizontal purification unit

The design is perfect of purification systems in ceilings and false ceilings.





Models	Height (mm)	Width (mm)	Depth (mm)
UP-1200 H14	360	750	1.500
UP-2300 H14	410	1.100	1.500
UP-3600 H14	410	1.500	1.500
UP-5200 H14	500	1.900	1.500



Boost current systems

# Ventilation systems: the complete solution

The ventilation system must be sized in such a way that guarantees the air flows needed in accordance with the occupancy and the activity of the building. Air filters in ventilation systems are essential elements in commercial areas and spaces where safety and greater health benefits are sought, in addition to a feeling of comfort.

The incorporation of filters for incoming outdoor air will prevent particles entering from the external environment (dust, pollen, fine particles  $PM_{10}$ ,  $PM_{2.5}$  and  $PM_{1}$ ), which will guarantee the protection and comfort of the occupants. In installations located in urban areas with high levels of pollution, the filtering stages will also include processes to eliminate gaseous pollutants.

In order to guarantee the efficiency of the ventilation and filtration system, it is essential to carry out a preliminary study, taking into account the particular needs of each space or building.



The benefits may vary depending on the combination of filters we use, achieving a certain level of protection, starting with basic levels of filtration, which protect against dust, up to levels of filtration with the ability to trap fine particles, bacteria and viruses.

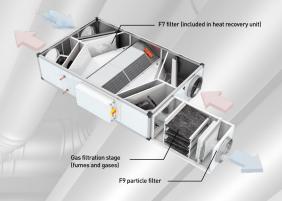


Ventilation systems: the complete solution

### **FB-IAQ HE**

IAQ modules CADB-HE to be installed with

They have two high-efficiency filtration stages, which give them high capacity to trap gases and particles contained in outdoor air such as  $H_2S$ , CO,  $SO_2$ ,  $O_3$  or  $NO_x$ , and  $PM_1$ ,  $PM_{2.5}$  and  $PM_{10}$  particles.



### **UVF ECOWAT**

Energy-efficient acoustically insulated ventilation units with integrated filters

Capacity to assemble up to three filters.

Filtration efficiency ePM $_{10}$  = 99,5 %, ePM $_{2,5}$  = 98,5 %, ePM $_{1}$  = 96,2 %.

Combination of filters	Filtration efficiency s/ISO-16890*			
	ePM <sub>10</sub>	ePM <sub>2,5</sub>	ePM <sub>1</sub>	
M5	55%	-	-	
F7	90%	83%	75%	
F9	95%	91%	85%	
M5+F7	95,5%	83%	75%	
M5+F9	97,7%	91%	85%	
F7+F9	99,5	98,5%	96,2%	



### CFL-N

Steel filter units for the CVTT series

Galvanised steel filter units, with capacity for two high-efficiency filters, from G4 to F9, ideal for supplying outdoor air in industrial applications. They adapt to the CVTT series ventilation units without accessories.





Ventilation systems: the complete solution

