



UPM/EC FE

MOBILE AIR PURIFICATION UNITS WITH ELECTROSTATIC TECHNOLOGY



- ELECTROSTATIC FILTER WITH BUILT-IN THERMAL SENSOR
- EC TECHNOLOGY MOTOR
- AUTOMATIC REGULATION AND CONTROL
- 3 STAGES OF FILTRATION
- THERMAL AND ACOUSTIC INSULATION
- EASY ACCESS FOR MAINTENANCE
- ANTI-GREASE TECHNOLOGY



FILTRATION STAGES

G2 + FE + FCA

UPM/EC FE

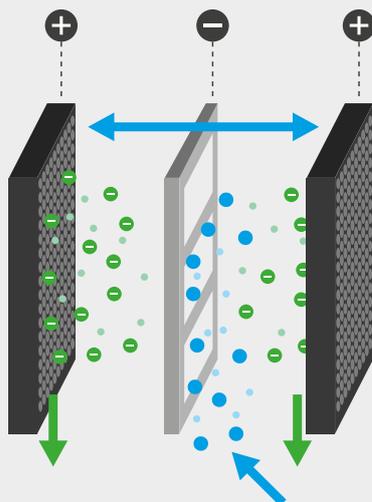
UPM/EC FE air purification units are designed for moving, cleaning, eliminating odours and purifying air **in high occupancy areas with a high content of grease and oil pollutants.**



ELECTROSTATIC TECHNOLOGY

FE electrostatic filters are especially useful for eliminating pollutants such as particles, bacteria, volatile organic compounds (VOC's), etc. The exceptional performance of these filters, together with their excellent ability to capture particles, results in this equipment operating with a very low load loss and therefore, their energy consumption is very low in comparison with that of conventional mechanical filtration systems.

HOW DOES IT WORK?



Particulate matter is ionised and becomes adhered to oppositely charged collector cells, thereby removing it from the outlet air flow.

Air purification by disinfecting using **ELECTROSTATIC FILTER technology is ideal for environments where pollutants are greasy, oily or are suspended particulate matter and which typically,** quickly saturate mechanical or fabric filters - electrostatic filters are washable and easy to maintain.

APPLICATIONS

- Industrial kitchens
- Hospitals
- Use in the agri-food sector
- Factories (suspended particulate matter and smoke up to 20 mg/m³)
- Smoke generated by welding
- Fast food restaurants
- Chemical and metallurgy industry

ADVANTAGES

Efficiency against germs and bacteria

Acts on all organic contaminants with an efficiency between 98 and 99.9%

Sustainable

Particulate matter accumulates on the collector plates. Proper cleaning of the filter guarantees the efficiency and increases the service life of the filter as well as of the unit.

Energy efficiency

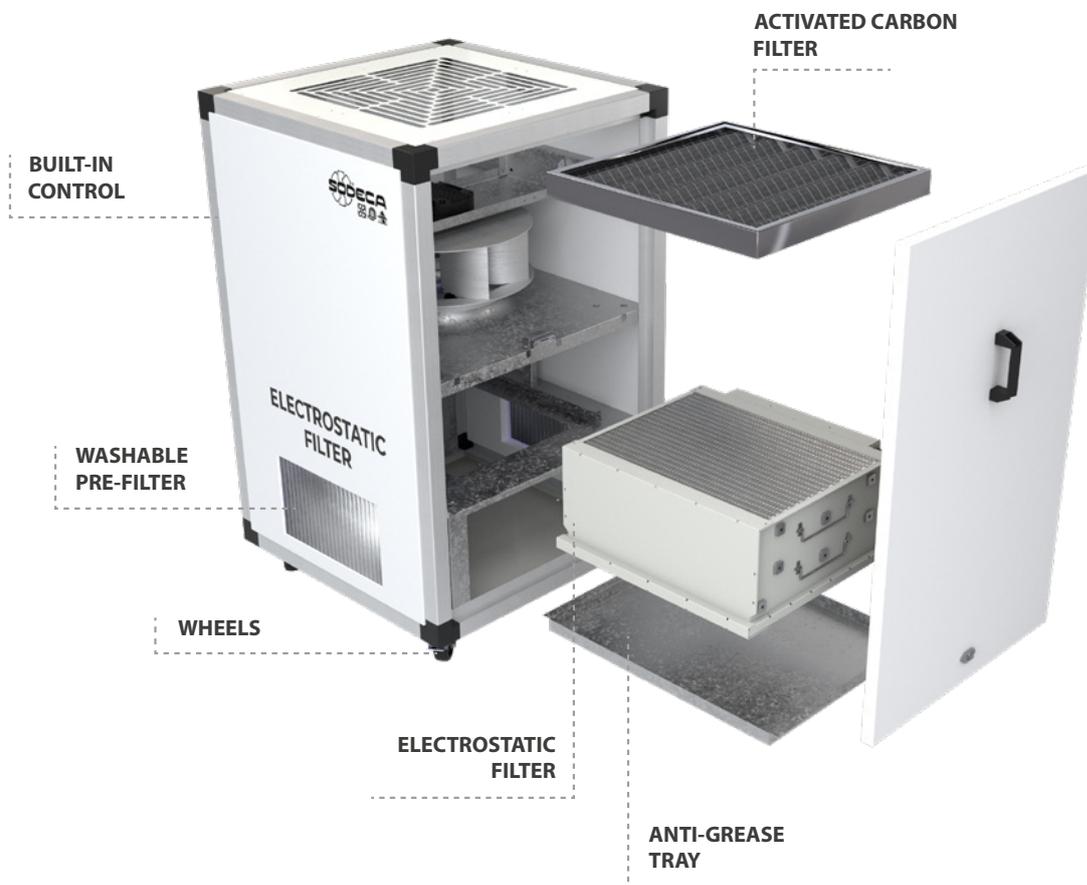
The electrostatic filter generates a low pressure-drop due to the low resistance to the passage of air, resulting in lower energy consumption. Additionally, these filters are highly efficient at collecting particulate matter and pollutants.

Anti-grease technology

Designed to operate in conditions where the through-air has a high grease content. A tray is installed at the bottom section of the filter to trap the grease that accumulates during the filtration process.

Low maintenance costs

Costs associated with replacing filters are eliminated. When the filter is saturated, simply wash it with water and detergent to restore the filtering function. This will not affect the electrostatic function of the filter. The length of time before cleaning is required is typically quite long.





ENERGY SAVINGS

Diffusers in the inlet panel prevent the air flow from swirling, which, together with a dynamic pressure balance chamber, increases the unit's performance.

The EC Technology type electric motor and the built-in electrostatic filter are both high efficiency units, and are essential for reducing 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.



ELECTROSTATIC FILTER

Built-in high efficiency electrostatic filter. Designed to improve indoor air quality, it also incorporates technology capable of trapping airborne grease.



WASHABLE FILTERS

The pre-filter and the electrostatic filter require minimal maintenance. They are washable and can be continuously reused.



ELIMINATION OF ODOURS

With an activated carbon filter.



EASY TO INSTALL AND MAINTAIN

The inside of the unit can be quickly accessed through the inspection panel for cleaning and for filter replacement if required.



AUTOMATIC CONTROL SYSTEM

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

UPM/EC FE

Mobile air purifying units with high-efficiency electrostatic filters. For use in applications with greasy particles



Air purifier units with high efficiency electrostatic filters, specifically designed for cleaning and purifying indoor areas where large amounts of grease or suspended particulate matter can be present.

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.
- High efficiency (95% ePM1) electrostatic filter device with built-in thermal sensor.
- Additional active carbon filter stage.
- Inspection cover for filter maintenance and replacement.
- Grease-collection tray.

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.

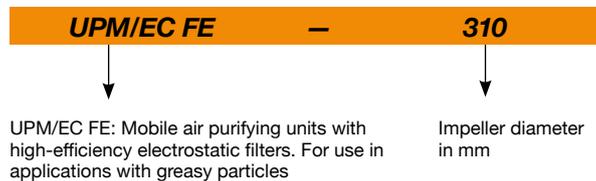
Finish:

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

On request:

- Negative ion ioniser.
- Particulate matter sensor for automatic control SI-PM2.5+VOC or SI-CO2+VOC.

Order code



Filter characteristics

ELECTROSTATIC FILTER	ePM ₁				ACTIVE CARBON FILTER	EN 779 Em	EN 1822	ISO 16890					
	95%	90%	80%	70%				ISO ePM ₁	ISO ePM _{2.5}	ISO ePM ₁₀	ISO COARSE		
Filtration class EN 779	-	-	F9	F8	F7								
Air speed (m/s)	1	2	2.5	3	4								
Air flow capacity (%)	40	50	65	75	100								
Pressure drop (Pa)	10	17	24	37	64								
						FCA	90%	-	-	-	-	-	60%

Technical characteristics

Model	Recommended effective working area ¹ (m ²)		Speed (r/min)	Power (W)	Power supply	Sound pressure level at 50% of max speed. ² (dB (A))	Maximum flow rate (m ³ /h)		Approx. weight (Kg)
	Grease particles	Dry particles					Grease particles	Dry particles	
UPM/EC FE-310	65	85	1920	175	200-240V 50/60Hz 1Ph	47	525	700	60
UPM/EC FE-400	195	245	1550	460	200-240V 50/60Hz 1Ph	47	1575	2000	111
UPM/EC FE-500	315	385	1250	1150	380-480V 50/60Hz 3Ph	51	2550	3120	184

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

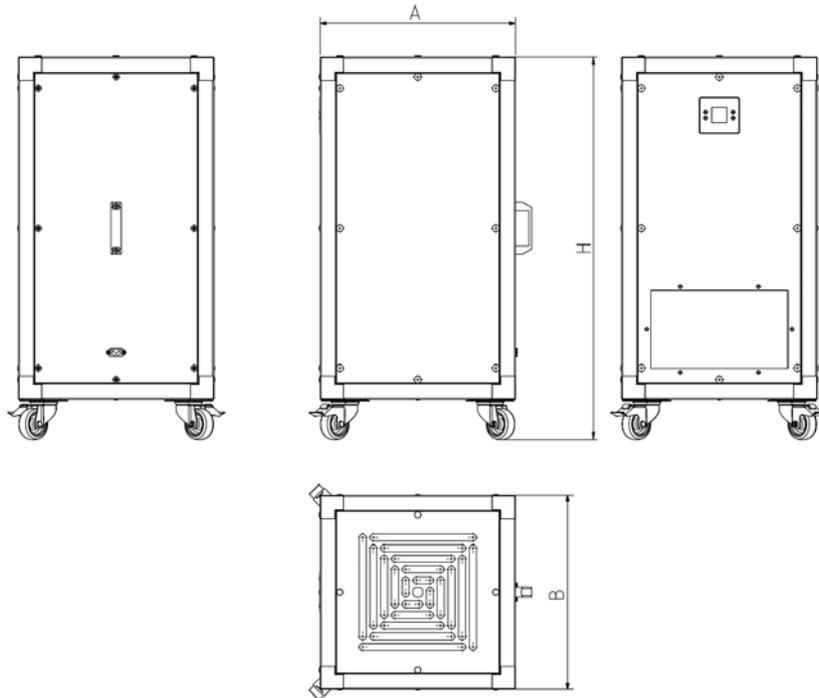
²Irradiated sound pressure level in dB(A) at a distance of 3 m.



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 FE-310	500	500	985
UPM/EC FE-400	701	701	1186
UPM/EC FE-500	901	901	1386



HEADQUARTER

Sodeca, S.L.U.
Pol. Ind. La Barricona
Carrer del Metall, 2
E-17500 Ripoll
Girona, SPAIN
Tel. +34 93 852 91 11
Fax: +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com

PRODUCTION PLANT

Sodeca, S.L.U.
Ctra. de Berga, km 0,7
E-08580 Sant Quirze de Besora
Barcelona, SPAIN
Tel. +34 93 852 91 11
Fax: +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com



EUROPE

FINLAND

Sodeca Finland, Oy
HUITTINEN
Sales and Warehouse
Mr. Kai Yli-Sipilä
Metsälännankatu 26
FI-32700 Huitinen
Tel. + 358 400 320 125
orders.finland@sodeca.com

HELSINKI
Smoke Control Solutions
Mr. Antti Kontkanen
Vilppulantie 9C
FI-00700 Helsinki
Tel. +358 400 237 434
akontkanen@sodeca.com

HYVINKÄÄ
Industrial Applications
Mr. Jaakko Tomperi
Niinistökatu 12
FI-05800 Hyvinkää
Tel. +358 451 651 333
jtomperi@sodeca.com

ITALIA

Marelli Ventilazione, S.R.L.
Viale del Lavoro, 28
37036 San Martino B.A.
(VR), ITALY
Tel. +39 045 87 80 140
vendite@sodeca.com

PORTUGAL

Sodeca Portugal, Unip. Lda.
PORTO
Rua Veloso Salgado
1120/1138
4450-801 Leça de Palmeira
Tel. +351 229 991 100
geral@sodeca.pt

LISBOA
Pq. Emp. da Granja Pav. 29
2625-607 Vialonga
Tel. +351 219 748 491
geral@sodeca.pt

ALGARVE
Rua da Alegria, 33
8200-569 Ferreiras
Tel. +351 289 092 586
geral@sodeca.pt

UNITED KINGDOM

Sodeca Fans UK, Ltd.
Mr. Mark Newcombe
Tamworth Enterprise Centre
Philip Dix House, Corporation
Street, Tamworth, B79 7DN
UNITED KINGDOM
Tel. +44 (0) 1827 216 109
sales@sodeca.co.uk

AMERICA

CHILE

Sodeca Ventiladores, SpA.
Sra. Sofía Ormazábal
Santa Bernardita 12.005
(Esquina con Puerta Sur)
Bodegas 24 a 26,
San Bernardo, Santiago,
CHILE
Tel. +56 22 840 5582
ventas.chile@sodeca.com

COLOMBIA

Sodeca Latam, S.A.S.
Sra. Luisa Stella Prieto
Calle7 No. 13 A-44
Manzana 4 Lote1, Montana
Mosquera, Cundinamarca
Bogotá, COLOMBIA
Tel. +57 1 756 4213
ventascolombia@sodeca.co

PERU

Sodeca Perú, S.A.C.
Sr. Jose Luis Jiménez
C/ Mariscal Jose Luis de
Orbegoso 331. Urb. El pino.
15022, San Luis. Lima, PERÚ
Tel. +51 1 326 24 24
Cel. +51 994671594
comercial@sodeca.pe

RUSSIA

RUSSIA Sodeca, L.L.C.

Mr. Stanislav Alifanov
Severnoye Shosse, 10 room 201
Business Park Plaza Ramstars
140105 Ramenskoye,
Moscow region, RUSSIA
Tel. +7 495 955 90 50
alifanov@sodeca.com



www.sodeca.com

