

Combination of Grease, Smoke and Odour Removal



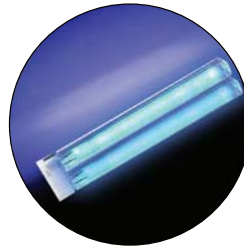
MAM-ESPE1C Series

MAM-ESPE1C Series is a 3-in-1 solution combination of grease, smoke and odour removal. Generally, it consists of ionizer and collector sections. The ionizer charges the fine particles and enter the collector section which made up of parallel spaced plates. Each alternating plate is charged with the same polarity as the charged particles which will in effect repel the particles on to the other set of plates that is grounded. The particles will remain collected at the grounded plates until they are washed away.

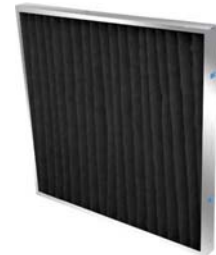
MAM-ESPE1C Series comes with built in UV light and optional carbon filter as a solution for kitchen exhaust odour removal. The UV light eliminates odour by producing ozone, then safely reacts with the odour-causing agents (VOCs), breaking them into less complex molecules through oxidation. On the other hand, carbon filter utilizes surface area and pore structures to remove odour through adsorption.



Collector Cell



UV Light



Carbon Filter

SERIES



Model	MAM-ESP30E1C	MAM-ESP40E1C	MAM-ESP60E1C	MAM-ESP80E1C	MAM-ESP120E1C
Input power	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz
Airflow (m3/h)	2400-3400	3400-4800	4800-6800	6800-9600	9600-13600
Efficiency	95%	95%	95%	95%	95%
Resistance* (Pa)	23	23	23	23	23
Dimension (L x W x H mm)	677x740x833	845x740x833	1187x740x833	1523x740x833	2201x740x833
Flange Mouth Dimension (A x B mm)	431x614	599x614	941x614	1277x614	1955x614
Rated Power (w)	96	117	192	234	351
Collector Cell Quantity	1	1	2	2	3
Power Pack Quantity	1	1	1	1	1
UV Light Quantity	1	1	2	2	3
Carbon Filter Quantity (Optional)**	1	1	2	2	3

SERIES



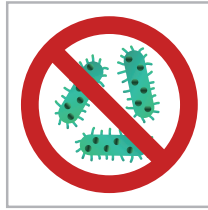
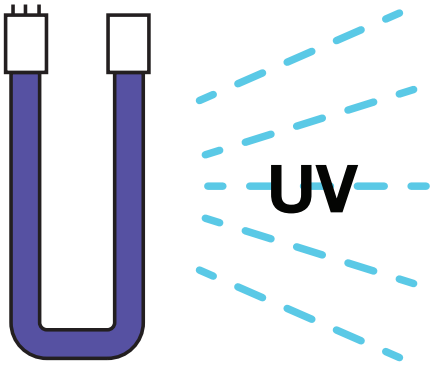
Model	MAM-ESP160E1C	MAM-ESP240E1C
Input power	220V/50Hz	220V/50Hz
Airflow (m3/h)	13600-19200	19200-28800
Efficiency	95%	95%
Resistance* (Pa)	23	23
Dimension (L x W x H mm)	1523x740x1536	2201x740x1536
Flange Mouth Dimension (A x B mm)	1277x1317	1955x1317
Rated Power (w)	468	702
Collector Cell Quantity	4	6
Power Pack Quantity	2	2
UV Light Quantity	4	6
Carbon Filter Quantity (Optional)**	4	6

*Resistance (Pa) indicated above refers to Collector Cell Resistance only.

**Standard unit come without carbon filter.

***Unit by default comes with perforated plate <150 Pa.

UV Light



254 nm (Germicidal)

254 nm wavelength ultraviolet energy is equivalent to 4.88eV, it is able to breakdown the molecular bonds in the contaminants, and kills bacteria.



185 nm (Odour removal)

185nm wavelength ultraviolet energy is equivalent to 6.7eV, it can decompose oxygen molecules in the air to produce active oxygen, then it generates ozone, which breakdown molecules with pollutants into harmless or low-hazard substances, such as CO₂, H₂O, etc.

UV Light can send out a large number of 185~254 nm (UVC) ultraviolet ray, UV light with UVC has strong disinfection effect. UV lamp sterilizer is mainly used to disinfection on surface of various objects such as air or water disinfection.

The working principle of UV light is through ultraviolet irradiation, destroy and change the microbial NDA (deoxyribonucleic acid) structure, make the bacteria immediately dead or unable to reproduce offspring, achieve the purpose of sterilization. What really kills bacteria is UVC. because C-band UV is easily absorbed by the DNA of the organism, especially at about 254 nm

The UV light also eliminates odour by producing ozone using 185 nm wavelength. The ozone safely reacts with the odour-causing agents (VOCs), breaking them into less complex molecules through a process called oxidation. In that way, the odour can be reduced significantly.

Carbon Filters for E1C Series

Honeycomb

SAAF Honeycomb Grid filters are designed to improve indoor air quality through the effective removal of indoor and outdoor gaseous contaminants typically found in the urban environment. This includes VOCs, SO_x, NO_x, and Ozone.

Configuration and Performance

- Filter Depth: 44 mm
- Media Type: Carbon
- Frame Material: Galvanised Steel
- Pressure Drop @ 2.5 m/s: 85 Pa



AmAir®/C, AmAir®/C+SAAFoxi™

Economical solutions to many gaseous contaminant problems including odors and corrosion control protection. Directly interchangeable with standard air filters.

Configuration and Performance

- Filter Depth: 44 mm
- MERV 7
- Media: Activated carbon (C), proprietary activated alumina impregnated with (SAAFoxi) potassium permanganate, and 50/50 blend (C+SAAFoxi).
- Filter Frame: Galvanised Steel
- Pressure Drop @ 2.5 m/s: 110 Pa
- UL Classified

