



**MODEL
DA-DM900UV-VO-VS**

WHOLE-HOUSE DUCT MOUNT HEPA AIR CLEANER WITH ULTRAVIOLET LIGHT & PHOTO CATALYTIC FILTER

Description

The Quartz[®] by DIRECT AIR offers the ultimate in air filtration and sterilization. This patent-pending combination uses HEPA, UVC Germicidal Light (non ozone producing) and Photo Catalytic Oxidation. It removes and destroys allergens, lung damaging atmospheric dust, biological and chemical contaminants and odors, such as formaldehyde, toluene, benzene, cooking odors, tobacco smoke, bacteria, viruses, mold and lots more. Ideal for residential and light commercial applications where there are allergy, asthma or respiratory sufferers, new construction odors, smokers, pets, cooking odors, mold, water and sewer damage.

Standard Features

Charcoal Prefilter protects the HEPA filter while removing lint, hair and larger particles.

Long-life, 99.97% HEPA Media Filter removes particles 0.3 micron (1/84,000 of an inch) and larger such as atmospheric and household dust, coal dust, insecticide dust, mites, pollen, mold spores, fungi, bacteria, viruses, pet dander, cooking smoke and grease, tobacco smoke particles and more. The HEPA filter becomes more efficient as it becomes dirtier with time.

Two UVC Germicidal Lights are enclosed in a Reflector which intensifies the UVC rays.

Unique CinQuartz[®] Photo Catalytic Oxidation Filter (PCO) has a very high surface exchange capability and allows UV light into the mass of the material — means there is absorption throughout the whole CinQuartz filter instead of just on the surface. The combination of the UVC light and the CinQuartz[®] decomposes organic materials into basic molecules such as H₂O and CO₂.

Charcoal/ Potassium Permanganate Final Filter for removal of Volatile Organic Compounds (VOC's) and light gases.

Powerful energy efficient, variable speed European motor delivers up to 250 CFM of pure air, without adding static pressure to the HVAC system.

Plug-in Power Cord provides convenient electrical connection.

Versatile installation can be duct mounted, collar mounted or used as a stand alone unit. Stands available with or without wheels.

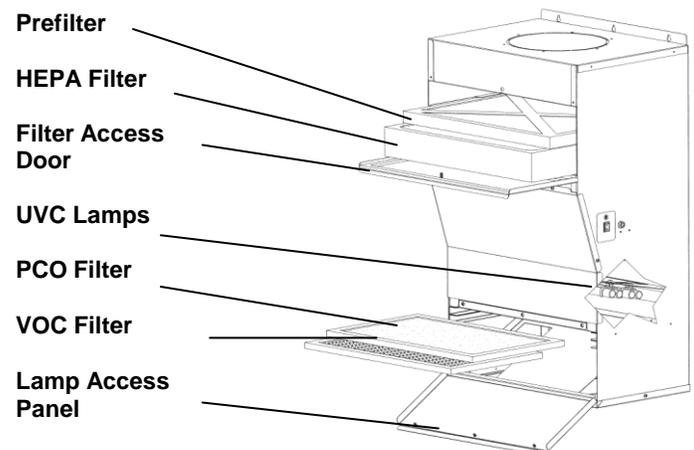


Cabinet Construction Features

One piece wrap, steel cabinet has powder-coat paint finish to provide rigid installation and durability.

Pre-punched openings at back of unit and mounting template are provided for easier duct mount installation; no external ducting required.

Pre-punched openings at top and bottom of unit facilitate collar mount installation.



Media Replacement Filters

PART	DESCRIPTION
DM900-0855	Charcoal Prefilter
DM900-0191	UV Lamp and gloves
DM900-0450	PCO Filter Photo Catalytic Oxidation
DM900-0810	Final Filter Charcoal/Potassium Permanganate

SPECIFICATIONS

MODEL	DA-DM900UV-VO-VS	
Air Flow: Variable Speed	Up to 250 CFM	Up to 425 m ³ /hr
Charcoal Prefilter: DM900-0855 Removes lint and large particles	Replace every 3-6 months	
Long-Life, 99.97% HEPA Media: DMH4-0400 Removes pollutants 0.3 micron	40 ft ² Replace every 2-4 years	3.7 m ² Replace every 2-4 years
Germicidal UVC Light: DM900-0191 Strongest light intensity kills bacteria, viruses, mold, fungi, allergens	2 Bulbs Replace every 13,000 hours or 2-3 years	
CinQuartz[®] Substrate PCO Filter: DM900-0450 Removes Volatile Organic Compounds (VOC's)	Replace every 13,000 hours or 2-3 years	
Charcoal/ Potassium Permanganate Final Filter: DM900-0810 Removes VOC's and light gases	Replace every 1-2 years	
Complete 2-3 Year Maintenance Kit: DM900-1003 Contains 1 HEPA Filter, 4 Charcoal Prefilters, 2 UVC Lamps, 1 Photo Catalytic Oxidation (PCO) Filter, 2 Charcoal/ Potassium Permanganate Final Filters, gloves	Replace every 2-3 years	
Cabinet Dimensions: H x W x D	29.5 x 16.25 x 12.75 in	74.9 x 41.3 x 32.4 cm
Intake Duct Fitting	14.5 x 3.75 in or 8 in (dia)	36.8 x 9.5 cm or 20.3 cm (dia)
Outflow Duct Fitting	14.5 x 4.37 in or 8 in (dia)	36.8 x 11.1 cm or 20.3 cm (dia)
Input Voltage	120 V 60 hz	
Power Consumption	200 watts	
Power Cord	10.0 ft	3.05 m
Unit Weight	47 lbs	21.3 kg

HOW IT WORKS

Millions of airborne pollutants are carried through the return air ducts of the heating/cooling system. The Air Purifier has been designed to be installed on the return air duct. A portion of this return air is by-passed through an opening on the back of the unit and passes through a 5-stage filtration system.

The air passes through a pleated Charcoal Prefilter which removes lint and large particles to extend the life of the HEPA filter.

Smaller particles then pass through a long-life, 99.97% HEPA (High Efficiency Particulate Air) Media Filter which captures particles 0.3 micron (1/84,000 of an inch) and larger.

The clean air passes through a reflection chamber where two Ultraviolet Germicidal Lamps emit powerful UVC light rays which are designed to kill or inhibit bacteria, viruses, mold, fungus and microbial growth. These are non-ozone producing lamps. The Ultraviolet Lights are also used to activate the unique CinQuartz Media located below the UVC lamps.

The Photo Catalytic Oxidation (PCO) Filter is a Quartz media coated with nanoparticles of Titanium Dioxide (TiO₂). The combined action of the UVC light and the TiO₂ decomposes organic materials into basic molecules such as H₂O and CO₂ and reduces odors and VOC's as a result.

A Charcoal/ Potassium Permanganate Final Filter further reduces VOC's and light gases. Clean air is discharged back into the return air duct.

