

Self-Contained Air Purification System Powerful and Portable

This Device Reduces Viruses, Bacteria and other VOCs within the Air Purifier



There are many facilities that need an immediate and portable solution to reduce a variety of air contaminants. This device addresses all four sources of indoor air pollution (particles, gases, aerosols and odors). The key to the system is photocatalytic oxidation that destroys viruses, bacteria and volatile organic compounds (VOC) in addition to particulate filtration within the air purifier.

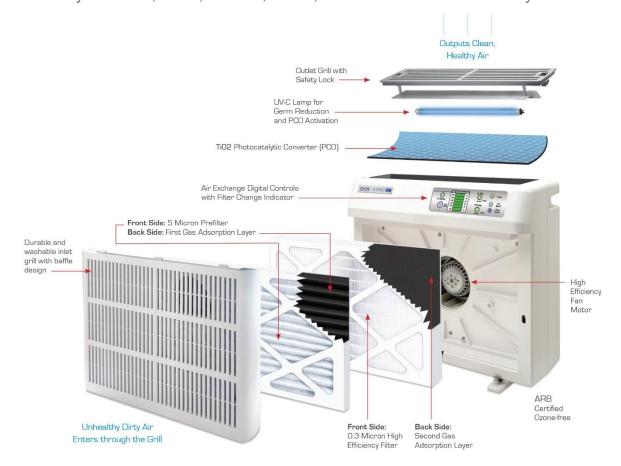


Typical Room Air Contaminant Reduction:

- Particles greater than 99%
- Bacteria greater than 93%
- Total Volatile Organic Chemicals (TVOC) greater than 90%

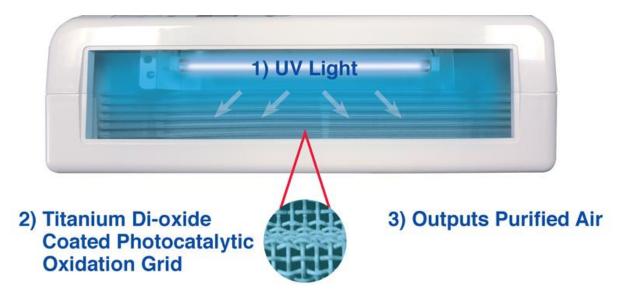
Multistages of Air Cleaning Technology to Produce Better Air Quality

The Portable Floor Device has the capacity and power to reduce indoor contaminants in your home, office, casinos, hotels, or medical facilities effectively.





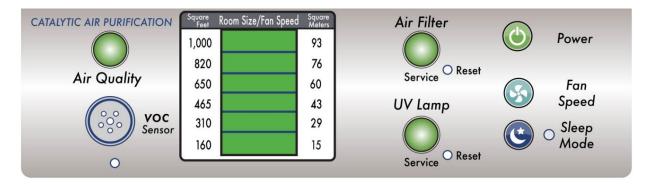
How it Works



- 1. When UV light illuminates the titanium di-oxide (TiO₂) coated photocatalytic oxidation grid, an activation process occurs.
- 2. The activation generates highly reactive hydroxyl radicals and superoxide ions resulting in a strong chemical "oxidizing" reaction between the supercharged ions and gaseous pollutants such as VOCs and odor molecules.
- 3. This breaks the pollutant down into trace amounts of carbon dioxide and water molecules, thus **purifying the air!**



Air Exchange Level Monitor and VOC Sensor Provides Total Indoor Air Quality Control



The air exchange monitor plays a huge role in providing the flexibility to change the air in a room to clean it. To achieve faster air purification, the fan speed can be increased to the maximum level.

- Monitor communicates when filter or lamp replacement is necessary
- VOC sensor detects VOCs and automatically adjusts fan speed

The 6 Stages of the Air Purification System

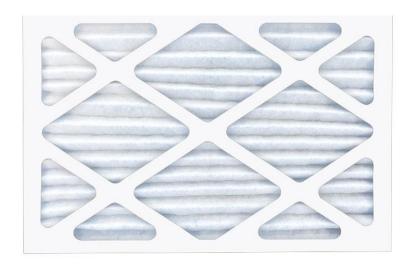
FILTRATION: Traps Particles as Small as 0.3 Microns including Dust,
Dander & Pollen

(See the following pages for the details)



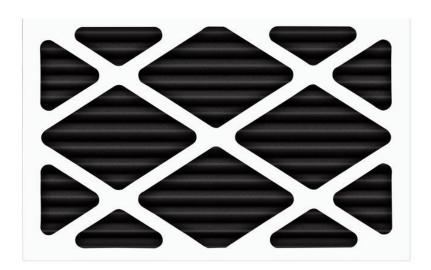
STAGE 1: 5 micron Prefilter (Front Side)

A 5 micron prefilter removes all particles from the air larger than 5 microns such as dust, dander, and pollen. The prefilter extends the life of the high efficiency filter and protects the gas adsorbing media from dust coating and fouling.



STAGE 2: Gas Adsorption Layer (Back Side of Prefilter)

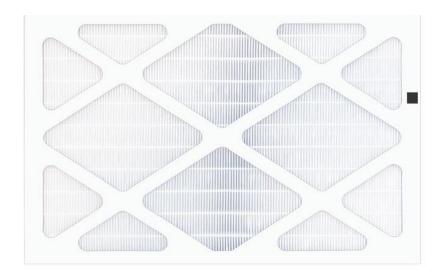
First gas adsorption layer (Black) on the back side of the filter is a specially formulated gas adsorption media that adsorbs exhaust fumes, organic hydrocarbons, paint solvents, chlorine, cleaning chemicals and other fumes.





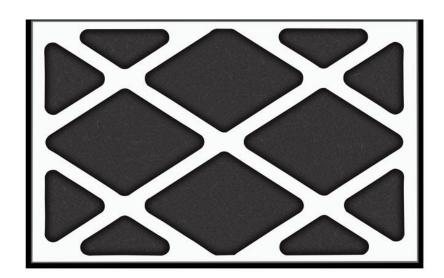
STAGE 3: 0.3 micron High Efficiency Filter (Front Side)

High efficiency filter that removes contaminants as small as 0.3 microns in size such as allergens, pollen, bacteria, viruses, spores and tobacco smoke.



STAGE 4: Gas Adsorption Layer 2 (Back Side of High Efficiency Filter)

A second gas adsorption layer (Black) on the back side of the filter is a specially formulated gas adsorption media that adsorbs exhaust fumes, organic hydrocarbons, paint solvents, chlorine, cleaning chemicals and other fumes.





STAGE 5: UV-C Lamp

Germicidal ultraviolet light (UV-C) is highly effective in destroying viruses and bacteria too small to be filtered out by a high efficiency filter. Ultraviolet technology combined with photocatalytic oxidation increases effectiveness of air disinfection.



ELIMINATION: Reduces Odors from Tobacco Smoke, Cooking and Volatile Organic Compounds (VOCs)

STAGE 6: Photocatalytic Converter

The key to photocatalytic oxidation is anatase TiO₂, a semiconductor catalyst material that becomes highly reactive when exposed to specific wavelengths of ultraviolet light. This chemically oxidizes the odor molecules and converts them into trace amounts of carbon dioxide and water molecules.





Tech Specs

Stage 1 — Prefilter: 5 Micron Rating

Gas Adsorption Layer: Activated Carbon

Stage 2 — High Efficiency Filter: 0.3 Micron Rating

Gas Adsorption Layer: Activated Carbon

Catalyst: TiO₂ Anatase

Dimensions: 21.5" W x 18.5" H x 8" D

Weight: 23 lbs

Sound Level: 48-68 dBA

Maximum Air Volume: 265 CFM (8 m³/minute)

UV-C Lamp: 254 nanometers (germicidal)

Two Options Available:

Part Number: 41-1311-01 / 41-1313

Line Voltage: 115 V/60 Hz / 220 V/50 Hz

Maximum Watts: 106 watts / 59 watts

Maximum Amperes: .89 A / .26 A

ETL, CARB*

*Applies to 41-1311-01