ENVIRONMENTAL GROUP, INC. Mini Split HVAC Air Purification System

A Photohydroionization™ (PHI) Technology



Patent Pending

The Mini Split PHI Cell by RGF® is designed to eliminate sick building syndrome risks by reducing odors, air pollutants, VOCs (chemical odors), smoke, mold bacteria and viruses. The Mini Split HVAC-PHI Systems are easily mounted onto air conditioning unit without modification of the unit using hook and loop adhesive strips. The Mini Split incorporates it's own pull out reusable copper/silver ionic germicidal electro static filter. When the HVAC system is in operation the Mini Split HVAC-PHI Cell creates an Advanced Oxidation Process consisting of: Hydro-peroxides, super oxide ions and hydroxide ions. All are friendly oxidizers. By friendly oxidizers we mean oxidizers that revert back to oxygen and hydrogen after the oxidation of the pollutant.

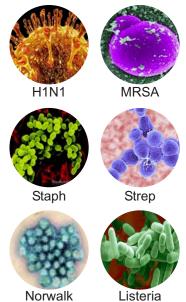
Why Use RGF's Photohydroionization™ Technology?

Germicidal UV light rays have been used for decades by the medical industry as a method for destroying micro-organisms (germs, viruses, bacteria). UV light is dependable and can be easily installed in HVAC ducts or a plenum. Germicidal UV light is effective in reducing only the airborne micro-organisms that pass directly through the light rays. However, germicidal UV light has little to no effect on gases, vapors or odors. Photohydroionization Advanced Oxidation, on the other hand, is very effective on gases, vapors, VOCs and odors.

Designed for split unit Mitsubishi and Fujitsu HVAC systems (HVAC unit not included)



Partial lab test results 99% reductions



Sneeze test 99% reduction at 3 feet

UV light enhanced by a hydrated quad-metallic compound target develops an advanced oxidation reaction that creates an Advanced Oxidation Proccess This process also produces hydro-peroxides, super oxide ions and hydroxides. By engineering the proper UV light wavelength, in combination with a triple function, no maintenance unit, The PHI Cell provides safe AOP to purify the air.

With the RGF HVAC-PHI Cell Advanced Oxidation System, micro-organisms can be reduced by over 99%. Gases, VOCs and odors can also be reduced significantly, and the room will have hydro-peroxides, super oxide ion and hydroxides which will help give your room fresh, clean and odor free air.

MINI SPLIT PHI CELL



•Hydro-peroxides distribution:	distributed thru mini split vents	
•Super Oxide Ion distribution:	distributed thru mini split vents	
Hydroxide Ion distribution:	distributed thru mini split vents	
•Installation:	installed on top of mini split	
•Electrical:	220 VAC	
•Materials:	Aluminum frame and polymer filter	
•Warranty:	2 years on parts	
•PHI Cell Replacement	Recommended after 2 years	

The **RGF Mini Split PHI Cell** unit size is scaled to accommodate the various air flow rates of different HVAC systems. **Note:** It is recommended these units be installed by a HVAC professional.

Item #	HVAC Air Blower Size	Approx. Sq. Feet	Dimensions Ship Wt.
HVAC-MINI-SPLIT	250* to 6.500 SCFM	Un to 1 000	30"W x 2 5"D x 1 25"H³ lbs.