

RGF[®]

ENVIRONMENTAL GROUP, INC.
PTAC HVAC Air Purification System
 A Photohydroionization[®] (PHI) Technology



Patent Pending

The **PTAC 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 PTAC HVAC-PHI Systems are easily mounted into air conditioning unit without modification. When the HVAC system is in operation the PTAC 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/destruction of the pollutant.

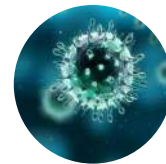
Why Use RGF's Photohydroionization[®] Technology ?

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 PTAC HVAC systems commonly found in hotel and motel rooms



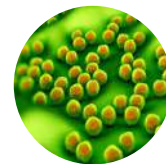
Partial lab test results 99% reductions



H1N1



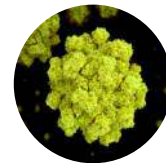
MRSA



Staph



Strep



Norwalk



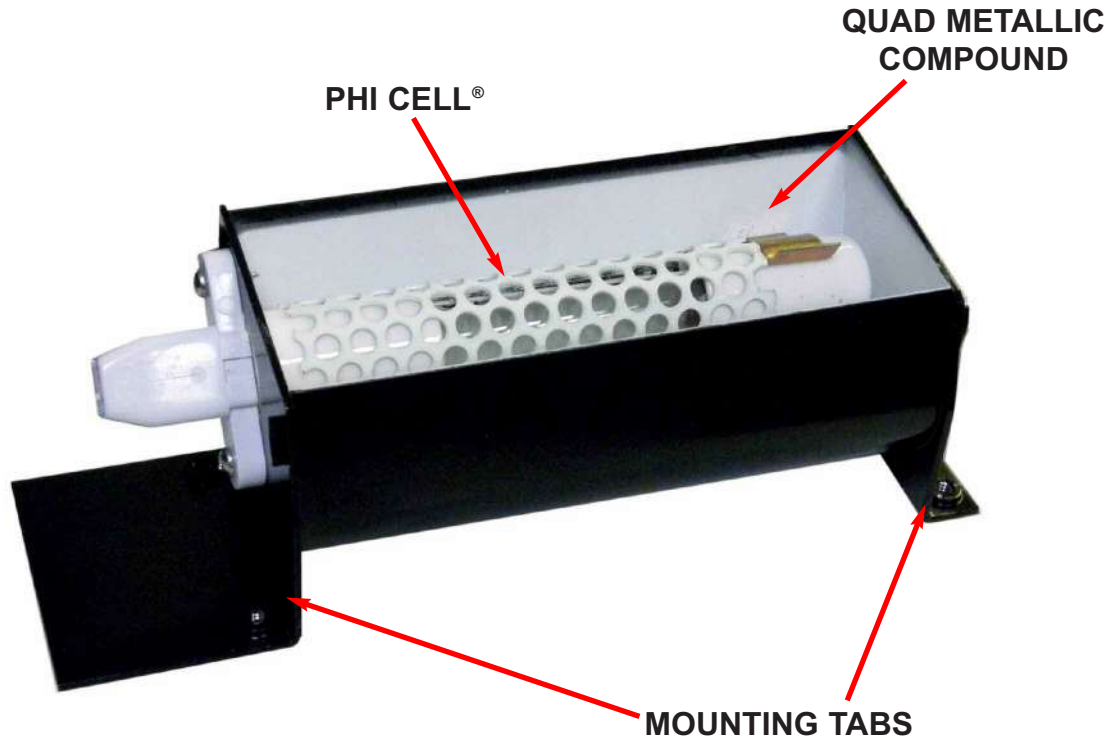
Listeria

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 Process. 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.

PTAC PHI CELL



•Hydro-peroxides:	Distributed thru PTAC vents throughout room
•Super Oxide Ion:	Distributed thru PTAC vents throughout room
•Hydroxide Ion:	Distributed thru PTAC vents throughout room
•Installation:	Installed inside of PTAC unit
•Electrical:	220 VAC
•Materials:	Aluminum and polymers
•PHI Cell Replacement	Recommended after 2 years

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

Item #	HVAC Air Blower Size	Approx. Sq. Feet	Dimensions	Ship Wt.
UNV-PTAC	250 to 500 CFM	Up to 1,000	8"W x 3"D x 3"H	1 lbs.

RGF Environmental Group, Inc.

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