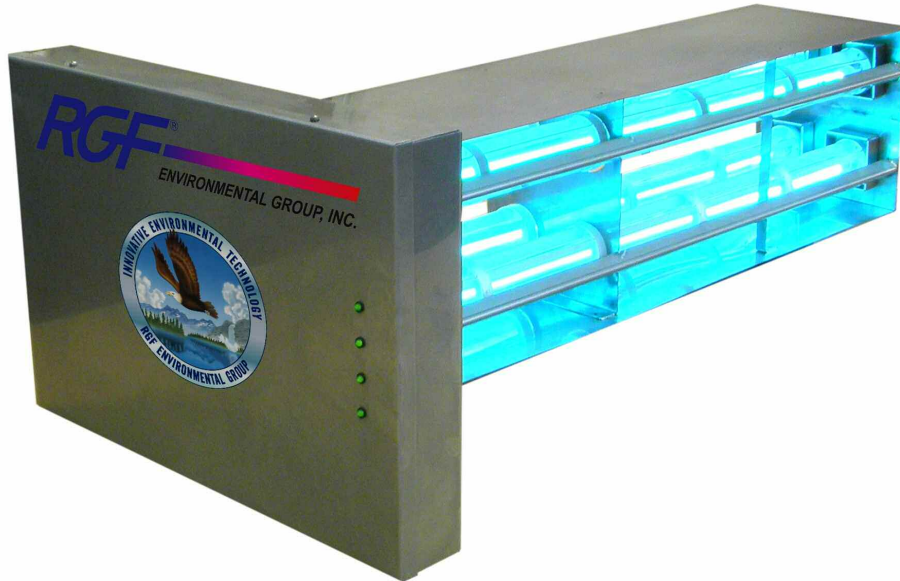


## COMMERCIAL PHI UNIT

A Photohydroionization<sup>®</sup> (PHI) Technology

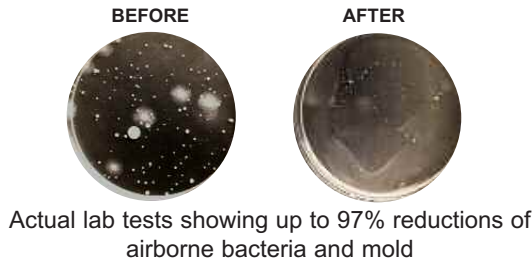


Patent Pending

The **Commercial PHI Unit** by RGF<sup>®</sup> is designed to reduce odors, air pollutants, VOCs (chemical odors), smoke, mold bacteria and viruses. The unit is easily mounted into air conditioning and heating system air ducts where most sick building problems start. When the HVAC system is in operation the **Commercial PHI Unit** creates an Advanced Oxidation Process consisting of: Hydro-peroxides, ozonide ions, 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. The system is available fully assembled for easy installation.

### Why Use RGF's Photohydroionization<sup>®</sup> Technology ?

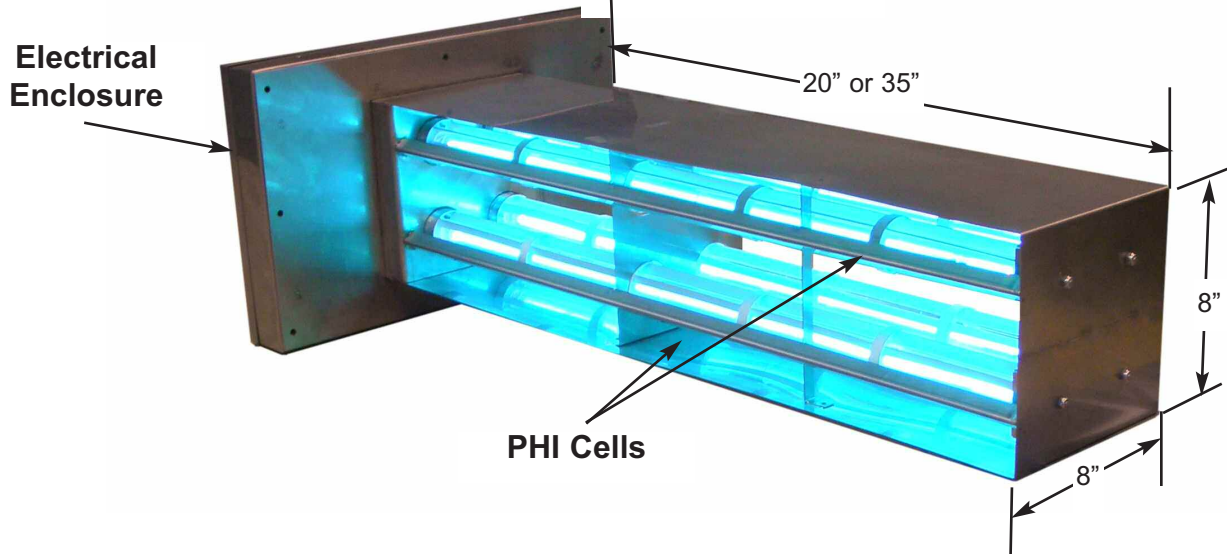
Germicidal UV light rays have been used for decades by the medical industry as a method for destroying micro-organisms (germs, viruses, bacteria). UV light is dependable and can be easily installed in HVAC ducts or a plenum. Germicidal UV light is effective in reducing only the airborne micro-organisms 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.



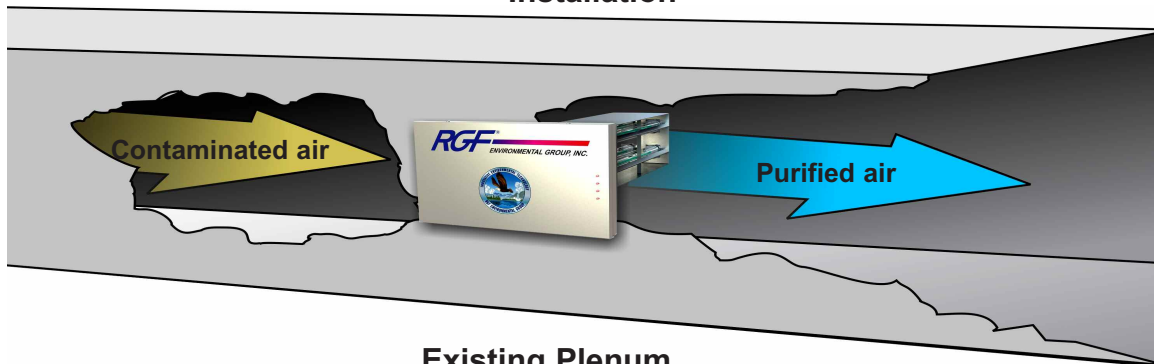
The combination of safe low level ozone (O<sub>3</sub>) and UV light enhanced by a hydrated quad-metallic compound target develops an advanced oxidation reaction that creates as well as reduces ozone to safe low levels. This process also produces hydro-peroxides, super oxide ions, ozonide ions and hydroxides. By engineering the proper UV light wavelength, in combination with a triple function, no maintenance unit, The PHI Cell provides safe hydro-peroxides, super oxide ions, ozonide ions and hydroxides to purify the air.

With the RGF HVAC PHI Cell<sup>®</sup> Advanced Oxidation System, micro-organisms can be reduced up to 99.99%. Gases, VOCs and odors can also be reduced significantly, and the room will have ozonide ions, hydro-peroxides, super oxide ion and hydroxides which will help give your room fresh, clean and odor free air.

## Commercial PHI



### Installation



### Existing Plenum

\*At 120 VAC 60 Hz

**Engineered to fit specific cfm applications in large commercial and industrial environments**

Commercial 20 - Housing is 20" L	# of cells	Length of cell	CFM Coverage	Tonnage	*	*
CML-25	1	14"	9,730	25	0.25A	30W
CML-50	2	14"	19,460	50	0.55A	72W
CML-75	3	14"	29,120	75	0.90A	108W
CML-100	4	14"	38,920	100	1.10A	132W
Commercial 35 - Housing is 35" L	# of 35" cells	# of 14" cells	CFM Coverage	Tonnage		
CML-65	1	0	25,020	65	0.60A	72W
CML-90	1	1	34,750	90	0.87A	104W
CML-115	1	2	44,480	115	1.20A	144W
CML-125	2	0	50,040	125	1.10A	132W
CML-140	1	3	54,210	140	1.10A	192W
CML-150	2	1	59,770	150	1.10A	132W
CML-180	2	2	69,500	180	1.80A	216W
CML-190	3	0	75,060	190	1.70A	204W
CML-215	3	1	84,790	215	2.05A	246W
CML-250	4	0	100,080	250	2.15A	258W