

# RGF<sup>®</sup>

## ENVIRONMENTAL

### **Commercial Air Purification System**

**A Photohydroionization™ (PHI) Technology**



Patent Pending

#### **Reduces Airborne**

- Smoke •Mildew / Mold
- Odors •Bacteria •Viruses\* •VOCs

#### **Effectively Reduces**

- Grease & Oils- (Restaraunts, Bars)
- Mercury - (Dental offices, Labs)
- VOC's - (Chemical odors)

#### **Benefits**

- Economical
- Low Maintenance
- 10,000 Hour Cell Life
- Light weight
- Compact
- Versatile

Ideal for restaurants, bars, larger meeting rooms, nursing homes, schools, locker rooms, health clubs, pet kennels and other similar commercial applications.

#### **The Problem:**

Indoor air pollution is now considered by the EPA and Congress to be America's No. 1 environmental health problem. Tightly sealed buildings and homes may be more energy efficient but can trap pollutants and microbes indoors causing allergies, odors, mold and illness.

#### **The Solution:**

The RGF APS has proven to drastically reduce airborne odors, mold, and bacteria in the 90+ percentile along with significant smoke reduction. Airborne FOGs also are reduced over 90% for restaurant applications and mercury is reduced over 90% for dental applications.

#### **The Technology:**

The APS utilizes RGF's Photohydroionization™ technology which utilizes safe low level ozone, super oxide ions, hydro peroxides, passive negative ions and uv light targeted on a hydrated tri-metallic target to develop an advanced photo-catalytic oxidation.

\*UV, Hydro-peroxides are recorded as effective in killing viruses however RGF has not performed clinical tests on viruses as there are thosands of strains

# How Does The APS Work?

The RGF APS is an extremely effective indoor air purifying system. It works through seven patent pending technologies - Photohydroionization™ and six proprietary high efficiency cartridge absorbers. RGF has combined these technologies to provide you with the Ultimate Air Purification System APS

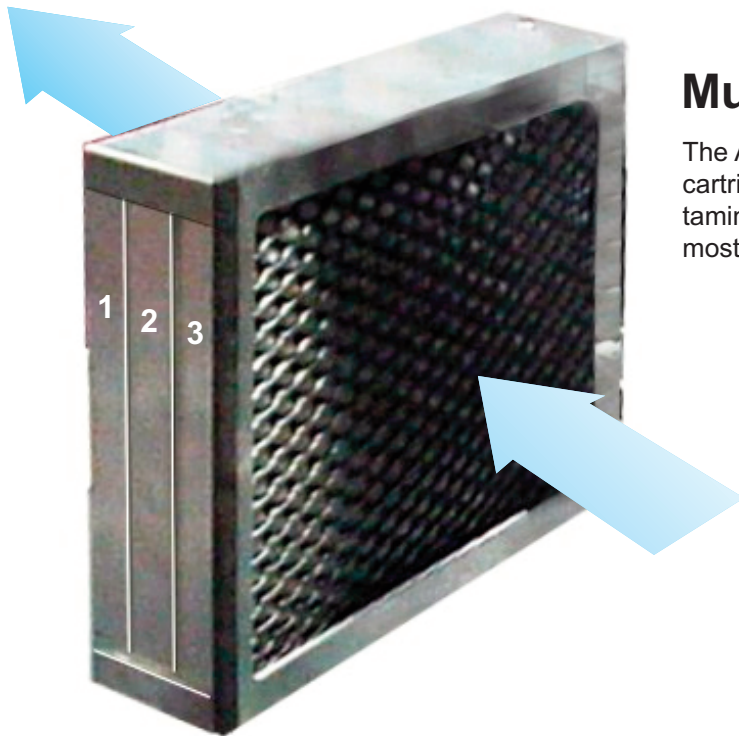
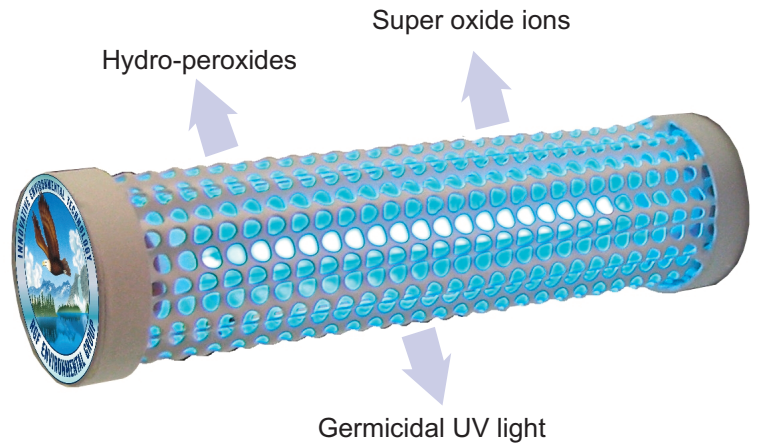
Here's how these technologies work:

## Photohydroionization™ Commercial Dual Module:

An advanced oxidation reaction occurs when light energy from the **ultraviolet (UV) cell** reacts with oxygen, ozone, a small amount of moisture in the air, and a hydrated **quad-metallic catalyst**. This reaction creates cleansing ions, such as hydroperoxides and super oxide ions, which are exhausted from the system into the surrounding air. The treatment of your air includes:

- suppression of bacterial growth (bacteriostatic)
- suppression of mold growth (mycostatic)
- reduction of odors
- reduction of chemicals (VOCs)

PHI Cell



## Multiple Absorber Cartridges:

The APS can utilize any three of the six different absorber cartridges to customize its effectiveness on certain contaminants. This feature makes the APS unique as the most versatile filtration system available.

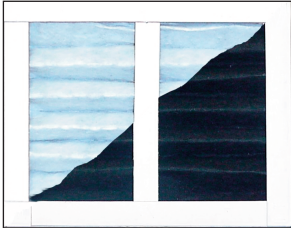


Optional vertical; stand for floor placement

Order # OP-004T

# High Efficiency Cartridge Absorbers

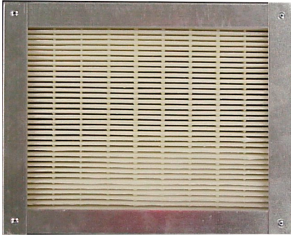
Each absorber is designed for a specific airborne contaminant



## Multi Cartridge Part # FL-001T and Multi Cartridge Plus Part # FL-002T

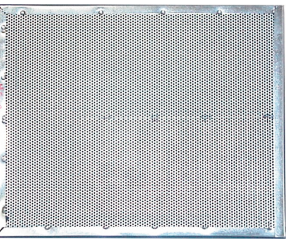
These general-purpose absorbers are an effective solution to moderate odor and particulate concerns. Airborne particulates are trapped on the inlet side of the absorber. The filtered air then passes through a unique carbon impregnated pleated layer. This design provides a cost effective solution to every day odor and particulate concerns. Available in 1" (FL-001T) and 2" (FL-002T) cartridges.

\*Both sides shown for illustration purposes (Included in standard APS unit)



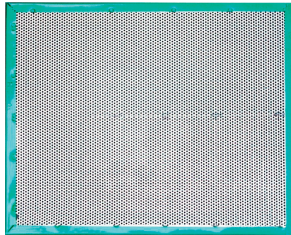
## Ultra Cartridge. Part # FL-003T

A 3" deep pleated cartridge for ultra fine particulate removal. Designed to meet ASHRAE test standards for 95% efficiency for particulate removal/absorption (near HEPA efficiency). Utilizes a copper/silver process for control of microbials usually associated with conventional filters.



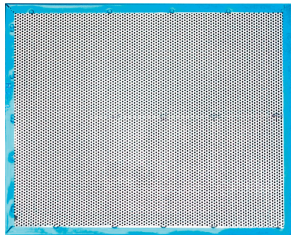
## Mercury Cartridge. Part # FL-008T

A media blend of natural elements that absorbs airborne mercury vapors. Ideal for labs, dental offices and industrial offices.



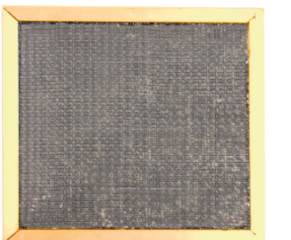
## VOC Cartridge. Part # FL-009T

A blend of natural elements and polymers that absorb airborne chemical fumes and VOC's such as smoke, solvents, oils, etc. Ideal for beauty and nail salons, restaurants and bars or anywhere industrial solvents are used.



## Radon Cartridge. Part # FL-010T

A blend of natural elements poly activated for efficient absorption of radioactive radon gas. Designed for basements or offices with radon problems.

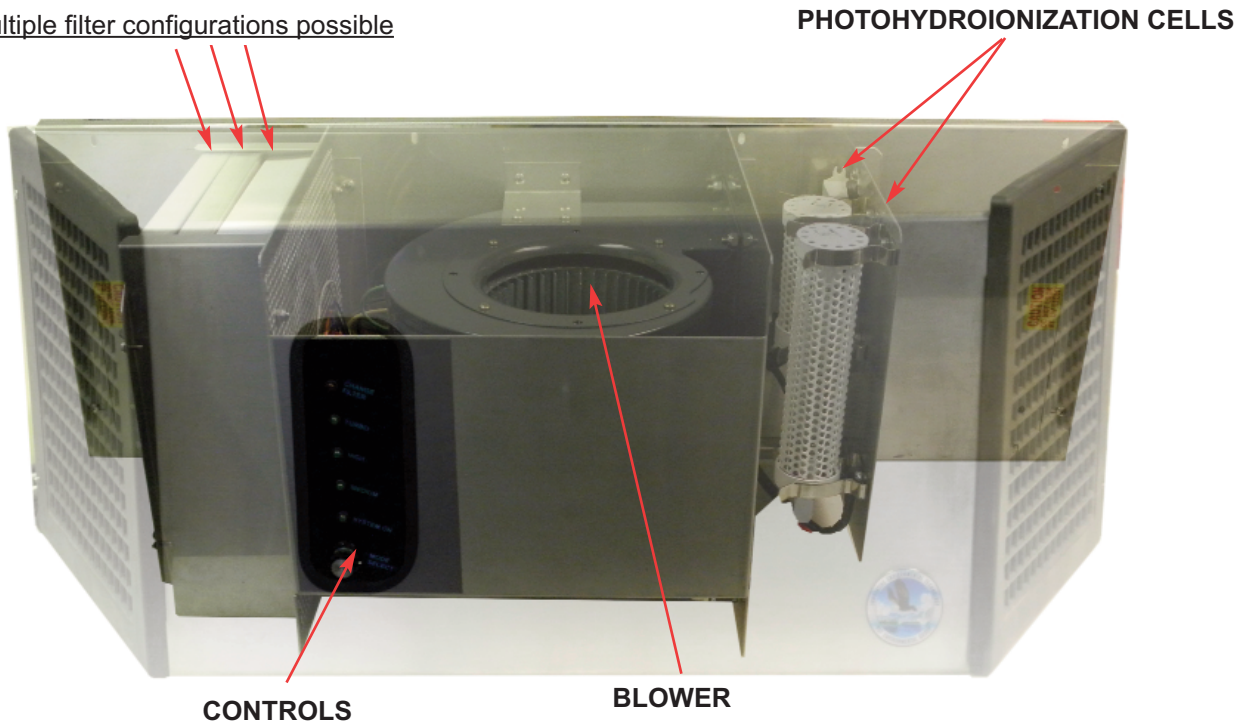


## FOG (fats, oils and grease) Cartridge. Part # FL-011T

A proprietary coalescing polymer with oiliphilic properties, acts as an FOG magnet. The FOG cartridge has the ability to absorb airborne FOG's to the sub-micron level. Cooking with FOG's will vaporize these pollutants into airborne health hazards. A unique copper/silver process controls media bacteria and mold growth on cartridge surfaces. (Included in standard APS unit)

# The Air Purification System by RGF

Multiple filter configurations possible



## SPECIFICATIONS

Dimensions	13"H x 12.5"D x 37"L
Weight	50 lbs
Free air delivery	500 cfm
Electrical	110 volt 5 amps
Order#	CAPS-16

## CONTROLS

- **ABSORBER CHANGE** Indicates absorbers need replacement
- **TURBO** 3 absorbers, blower, 2 targeted photohydroionization cells
- **HIGH** 3 absorbers, blower, 1 high intensity targeted photohydroionization cells
- **MED** 3 absorbers, blower, 1 targeted photohydroionization cells
- **LOW** 3 absorbers, blower

## ABSORBER CARTRIDGES

- (1) **MULTI CARTRIDGE** ODORS AND PARTICULATE
- (2) **ULTRA CARTRIDGE** PARTICULATES - LOW LEVEL ELIMINATION
- (3) **MERCURY CARTRIDGE** REMOVAL MERCURY VAPORS
- (4) **VOC CARTRIDGE** SMOKE, VOCS, CHEMICAL
- (5) **RADON CARTRIDGE** REMOVAL RADIOACTIVE RADON GAS
- (6) **FOG CARTRIDGE** (FATS, OILS, GREASE)

***RGF Environmental Group, Inc.***

1101 West 13th Street Port of Palm Beach Enterprise Zone Riviera Beach, Florida 33404  
800 842-7771 Fax 561 848-9454 www.rgf.com