



*Solutions for a Cleaner Environment*

## PCO Unit: HVAC Probe

### *The Newest Generation of Proactive Air & Surface Purification*

We want to believe that our indoor air is clean and healthy. However, indoor air pollution is a big environmental health concern. The EPA reports:

**5x**

**Indoor air is 5x more polluted than the air outside**

**50%**

**Polluted indoor air accounts for causes 50% of all illnesses**

**90%**

**The average person spends 90% of their time indoors**

The average person breathes in air 23,000 times a day. Now ALCO is able to provide you with a solution to provide clean air to your customers, patrons, staff, students, and/or patients. Partnered with Inspired TEC, photo-catalytic oxidation is the newest generation of proactive air and surface purification.

### **Photo-Catalytic Oxidation (PCO) combats pathogens in the following 3 ways:**

#### **FLOCCULATION**

- Forms inert particles most of which are positively charged by sending out negatively charged ions
- These ions attract the oppositely charged particles, which causes them to clump, gain mass and fall from the breathing space

#### **MOLECULAR DISSOCIATION**

- VOC's & Odor molecules are broken apart at the molecular level
- These sub molecules are also broken apart until this cascading effect leads to the most basic elements of harmless CO2 & water vapor

#### **CLUSTER IONS**

- Actively seek out bacteria and viruses and attach themselves
- This punctures their membrane and allows the hydrogen to be sucked out
- Because hydrogen is their lifeline they are rendered inactive

The company we've partnered with is the only manufacturer to fully embrace all three forms of PCO in their technology. PCO Units are completely safe to have around humans, animals and plants. They remove VOC's, odors, bacteria, viruses, mold and particulates making this a great solution for cleaner air.

*These PCO Units are set apart because they are classified as active technology meaning they are constantly decontaminating the areas they're installed in 24/7 and are designed to be used in occupied spaces.*

## **FAQs on PCO Technology:**

### **Is PCO Technology registered with the EPA?**

No, the EPA regulates chemicals and in this case there is no chemical being used.

### **What is it effective against?**

As mentioned, PCO technology purifies the air and surfaces of VOC's, Odors, Bacteria, Viruses, Mold and Particulates. PCO is effective against a wide variety of bacteria and viruses because it attacks their cell make up, leaving them inactive and harmless. This includes MRSA, C-Diff (including spore form), Influenzas, Noroviruses and more. You can read about multiple case studies and testing results on Inspired Tec's [website](#).

## FAQs Continued:

### Is it effective against COVID-19?

PCO technology has been tested and proved effective against using Feline Calicivirus (FCV) which can act as a surrogate for the SARS-CoV-2 virus. FCV is in the genus Vesivirus and is very similar to Norovirus, SARS and the virus that causes COVID-19 both in structure and membrane.

### If the technology is constantly working, does this replace the need for masks and disinfecting?

There are many places, including Ohio, with mask mandates in effect and having this technology does not exempt businesses from those mandates. Disinfecting is still an important part of any cleaning routine. Some industries are having to disinfect 10+ more times a day than they did pre-COVID. This technology would enable those types of industries to get back to a more normal cleaning and disinfecting schedule.

### How do you know if the technology is working?

A blue cell light is visible on all units and the HVAC Probes (which are installed in ducts) have a Fiber Optic Cable which provides a small blue glow on the outside of unit. If this blue light is visible, the machine is on and working properly. After installation and the units have been given time to fill the area with ions, you may also be eligible for a free swab test through an independent lab to validate the efficacy of the technology.

### Does this technology generate ozone?

It is not considered an ozone generator - The Food and Drug Administration (FDA) requires ozone output of indoor medical devices to be no more than 0.05 ppm. EPA's National Ambient Air Quality Standard for ozone is a maximum 8 hour average outdoor concentration of 0.08 ppm. The Occupational Safety and Health Administration (OSHA) requires that workers not be exposed to an average concentration of more than 0.10 ppm for 8 hours. The output of PCO units is 0.02 ppm, therefore it falls more than halfway below even the lowest requirement.

### How long are you guaranteed efficacy?

These units guarantee 2 years of full efficacy. Every 2 years the cell of the unit needs replaced in order to keep efficacy at maximum capacity.

## The HVAC Probe Unit:

The HVAC Probe was developed to integrate with your existing Heating & Air Conditioning system and helps keep duct system free from contaminants. Reduces "A" coil cleaning maintenance. A cleaner coil provides more energy efficient system, reduces bio-nesting, and leads to less frequent filter changes. This unit requires fan to be running 24/7 to work properly 24/7. It is available in three different sizes and covers/cleans larger areas with proactive technology (reducing cost per cubic foot).

Your sales representative can work with you to help design a complete coverage system for any facility. All that is required is a PDF file copy of your HVAC drawings so our technical consultants can review your HVAC plans and suggest the optimal placement of probes.



#### SPECIFICATIONS:

HVAC-3000 Cell Coverage: 3,000 Sq. Ft. w/ 8' Ceilings - Electrical: 13.3 Watts  
HVAC-6000 Cell Coverage: 6,000 Sq. Ft. w/ 8' Ceilings - Electrical: 19.2 Watts  
HVAC-12000 Cell Coverage: 12,000 Sq. Ft. w/ 8' Ceilings - Electrical: 33 Watts

#### DIMENSIONS:

HVAC-3000 - 8" x 8" x 11" - 2.8 lbs  
HVAC-6000 - 8" x 8" x 16.75" - 3.0 lbs  
HVAC-12000 - 9.81" x 11.31" x 17" - 4.5 lbs

**Call Today to Learn More! More Units Available, Visit Our Website:**

[www.alco-chem.com](http://www.alco-chem.com)

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