

Pyure Dynamic Protection® Installed Solutions for Commercial Air Purification

Effective treatment of large indoor spaces and entire buildings

Company

Air Purification Technology That's Safe and Natural

Pyure Dynamic Protection® custom solutions efficiently **treat large areas**, including entire buildings. Pyure systems feature sensor driven, interactive process controls and continuous data logging. They are **scalable** to any size and offer significant economies of scale when treating large surface areas. They can be integrated into a single or multiple HVAC / air handling systems, depending on building layout and configuration.

Our solutions provide **dynamic pathogen protection** and **air quality improvement** by using hydroxyl generation to mimic the way sunlight sanitizes our outdoor environment.



Purifies and sanitizes air

- Kills airborne viruses, bacteria and mold
- Neutralizes and decomposes VOC and other chemicals



Sanitizes surfaces and porous materials

- Kills viruses, bacteria, yeast and mold
- Is not harmful to materials



Eliminates odors

- Cigarette smoke
- Chemical odors
- Mildew

What are Hydroxyls and How Do They Work?

Hydroxyls are natural and the most important sanitizing agent in our outdoor environment. By decomposing natural and man-made pollutants and **killing pathogens**, they keep air safe to breathe.

Hydroxyls do not exist naturally indoors - they are consumed within milliseconds when produced by sunlight. Pyure Technology® is designed to bring the cleansing power of the sun indoors, producing the same concentrations of hydroxyls and natural oxidants as found in nature.

Helping Customers Improve Health, Wellness and Peace of Mind

We work with customers in many industries who have **critical sanitization** and air quality considerations.

Our **customers choose** Pyure because our products help them deliver the greatest social, environmental and economic returns.

Serving

- Healthcare
- Senior living
- Commercial
- Education
- Hospitality
- Food & agriculture
- Industrial applications

Delivering Air Purification Solutions for Over 15 Years

The Pyure Company is a privately-owned enterprise with corporate headquarters and manufacturing facilities located in Boynton Beach, Florida. We were **established** over **15 years** ago as HGI Industries Inc, and changed our name to The Pyure Company in 2020.

Values

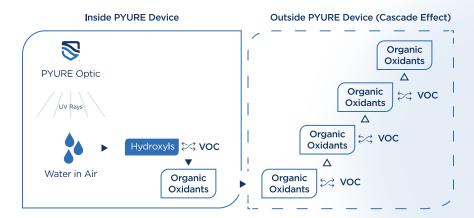
- Innovation
- Quality
- Continuous improvement
- Customer satisfaction

Technology

Powered by Pyure Technology®

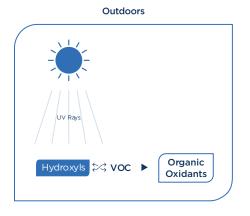
Indoors with Pyure Dynamic Protection®

Pyure produces the same concentrations of hydroxyls & organic oxidants as the sun generates outdoors



Nature's Process Outdoors

Sunlight produces hydroxyls & organic oxidants



20-40 milliseconds

hydroxyl reaction time

2-4 million molecules/cm³

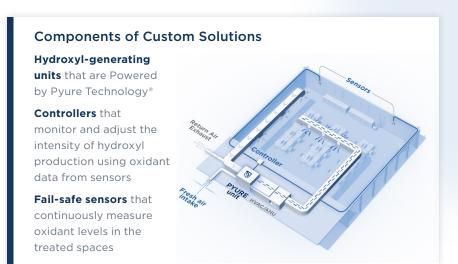
hydroxyl production similar to nature: 3 to 10 million molecules/cm³

(David R. Crosley, Connie J. Araps, Melanie Doyle-Eisele & Jacob D. McDonald (2017) Gas-phase photolytic production of hydroxyl radicals in an ultraviolet purifier for air and surfaces, Journal of the Air & Waste Management Association, 67:2, 231-240, DOI: 10.1080/10962247.2016.1229236).

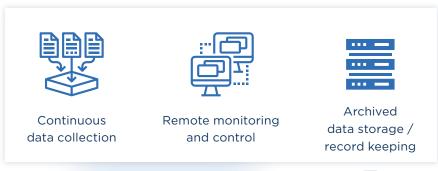
Pyure Dynamic Protection® Installed Solutions

Pyure Dynamic Protection® systems feature **sensor driven**, interactive process controls. They are scalable to any size and offer significant economies of scale when treating larger surface areas. They can be integrated into a single or multiple HVAC / air handling systems, depending on the building layout and HVAC configuration.

Pyure's proprietary software and control logic ensure that the system is performing uniformly and optimally and that oxidant levels stay well within the safe limits set by the EPA and OSHA.

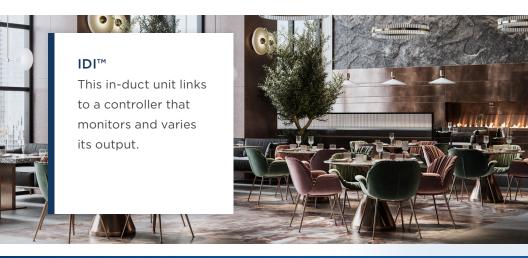


Additional Features of our Installed Solutions



Products

Pyure Dynamic Protection® Products



MVP14™

With greater hydroxylgenerating capability than the IDI™, this unit is ideally suited for HVAC systems with limited space, such as older buildings and the air handling systems on cruise ships.



Custom Solution Design Process

After assessing your needs in detail, the Pyure technical team provides a full proposal for an installed solution.

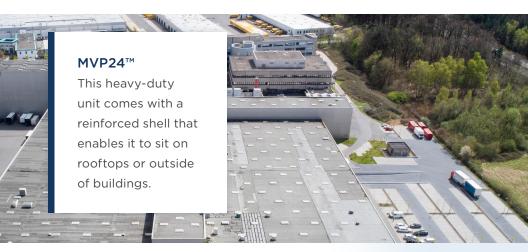
✓ Needs Analysis

First we understand your air purification needs and HVAC layout.

✓ Solution Proposal

After assessing your needs in detail, the Pyure technical team provides a full proposal for an installed solution.

Our installed solutions incorporate one or more of the following products based on the size of the facility being treated, the specificities of the HVAC system and customer needs.



MVP48™ This is our most powerful unit and ideal for large installations or new builds where space is available.

How to Get Started



Installed solutions can be purchased from authorized distributors.

sales@pyure.com | 1-877-735-3701

Safety & Efficacy

Safe and Natural Protection

Pyure Technology® produces the same concentrations of hydroxyls and organic oxidants that are naturally present in our outdoor environment.

Safe concentrations:

Pyure air purifiers are engineered to produce safe levels of total oxidants when operating guidelines are followed.

<50 PPB (Parts Per Billion)
Total oxidants,
including ozone



Scientific literature:

There is no evidence in the scientific literature of any safety issues with atmospheric hydroxyls and organic oxidants at these naturally occuring concentrations.

No adverse evidence in existing databases

- NIH
- CDC
- FDA
- OSHA



Independent toxicity study:

As further evidence of safety, Pyure had an independent lab undertake a 13-week GLP toxicology study that showed there were no adverse effects.

Toxicity Study

- 13 week study
- 24/7 continuous exposure
- **3**X higher exposure levels
- No effect on exposed rats



Airborne Pathogen Destruction

Pyure Technology® kill rates on airborne viruses, bacteria and mold.

>99% reduction in 30 minutes

SARS-CoV-2 aerosolized (COVID-19 virus)		MS2 virus aerosolized (simulant for coronavirus)		PhiX174 virus aerosolized (simulant for smallpox)	
Reduction	Time	Reduction	Time	Reduction	Time
99%	20 min	99.9%	30 min	99.9%	30 min
Not Detected	80 min	99.999%	90 min	99.99%	60 min
Staphylococcus E. aerosolized (gram + bacteria*)		E. herbicola aerosolized (gram - bacteria*)		Aspergillus Niger aerosolized (black mold)	
Reduction	Time	Reduction	Time	Reduction	Time
99%	30 min	99%	30 min	99.9%	30 min
Not Detected	90 min	99.99%	120 min	Not Detected	90 min

Surface Pathogen Destruction

Pyure Technology® kill rates on surface viruses and bacteria.

SARS-CoV-2 virus (COVID-19 virus) on glass		Influenza (H1N1) virus on glass		Norovirus (Murine) on glass	
Reduction	Time	Reduction	Time	Reduction	Time
99%	1 hour	96%	1 hour	94%	1 hour
Not Detected	3 hours	99.999%	6 hours	99.998%	6 hours
Poliovirus 1 (Sabin) on glass		Adenovirus 5 on glass E. Coli/Bacte stainless steel (s.s)/			
Reduction	Time	Reduction	Time	Reduction	Time
90%	1 hour	90%	1 hour	99.99%	3 hours (s.s)
99.99%	6 hours	99.99%	6 hours	99.9%	3 hours (cotton)

Uniquely Differentiated & Scalable

Powerful and Natural Sanitization Solutions

Pyure Technology® effectively treats air and surfaces in occupied spaces. By recreating the natural cleansing action of the sun indoors, Pyure delivers safe and effective performance that is unmatched.



	PYURE	Filters (HEPA)	Photocatalytic Oxidation	Ionization	Germicidal UV In-Duct	Hydrogen Peroxide
Safe for Occupied Spaces	Yes	Yes	Yes	Yes	Yes	Yes***
Reduce Pathogens in Air - Inside the Device	Yes	Yes	Yes	Yes	Yes	No
Reduce Pathogens in Air - Outside the Device	Yes	No	Limited*	Limited**	No	Limited***
Kills Pathogens on Surfaces	Yes	No	Limited*	Limited**	No	Limited***
Safe for Materials	Yes	Yes	Yes	Yes	Yes	No
VOC & Odor Removal in Air Inside the Device	Yes	No	Yes	Yes	No	No
VOC & Odor Removal in Air Outside the Device	Yes	No	Limited*	Limited**	No	No
Sensor Driven Interactive Controls with Data Logging	Yes	No	No	No	No	No
Scalable	Yes	Yes	No	Limited	No	No
Remove Particulates	No	Yes	No	Yes	No	No

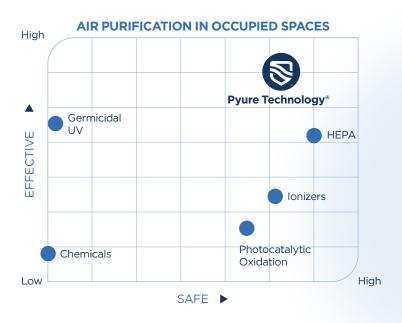
^{*} Hydroxyl production is restricted to the catalyst surface, very limited production of organic oxidants

^{**} Reactivity of ions and O2 are short lived, effect drops off quickly as distance from ion source increases

^{***} At concentrations that are safe for human exposure (less than 1 PPM), pathogen reduction is limited

Unique Positioning

Only Pyure Technology® offers high efficacy and safety for both indoor air purification and surface sanitation.







How to Work With Pyure

To learn more about our installed solutions, contact:





+1 (877) 735-3701

