



## TWO GREAT SOLUTIONS FOR FACILITY DISINFECTION: NEEDLEPOINT BIPOLAR IONIZATION (NPBI) & UVC GERMICIDAL LIGHTING

INSTALLATION OF EITHER TECHNOLOGY WITHIN A BUILDING'S HVAC SYSTEM DELIVERS AN IMMEDIATE IMPROVEMENT IN INDOOR AIR QUALITY (IAQ).

### NPBI

NPBI represents a major step forward in ionization technology. Unlike earlier bipolar ionization technologies (Corona Discharge), NPBI delivers all the disinfection benefits without generating ozone. NPBI uses an electronic charge to create a plasma field of both positive and negative ions that travel within the air stream attaching to pathogens, particles, and gas molecules to break them down and render them ineffective.

This technology has been in use since the 1970s, and there are hundreds of thousands of installations worldwide. Independent testing from April 2020 showed that NPBI deactivated 99.4% of SARS COVID-2 (the virus that causes COVID-19) in 30 minutes. Importantly, NPBI technology safely deactivates pathogens in the air and on surfaces in real-time, while spaces are occupied.

### UVC

UVC is often referred to as Germicidal UV (GUV), as it effectively kills bacteria and deactivates viruses. Because of its known disinfection qualities, UVC has been used widely for that purpose since the 1930s.

In most applications, however, UVC technology involves strict safety protocols to avoid the risk of potentially hazardous human exposure.

Today, this legacy technology can be installed within HVAC systems to deliver all the known benefits without any of the potential hazards. Installation of UVC lighting within building HVAC systems delivers proven germicidal ultraviolet disinfection during normal operating hours when buildings are occupied, without any of the risks associated with traditional UVC fixtures.





## WHICH TECHNOLOGY IS RIGHT FOR MY FACILITY?

At FSG we have a team of subject matter experts that can help guide you to the disinfection solution that is right for your facility. We have expert teams installing Ionization & UV disinfecting systems for school districts, commercial facilities, and more. If all you have is a question about what you can do to improve the IAQ at your facility, we can help.

	NPBI	UVC
Can be operated when the facility is occupied	✓	✓
Neutralizes pathogens such as mold, bacteria, and viruses	✓	✓
Fast and easy installation	✓	✓
HVAC technician not required	✓	✓
Annual maintenance not required	✓	
VOC/Odor elimination	✓ *	
Provides continuous disinfection	✓	✓
Scalable to fit AHU's	✓	✓
Immediate HVAC System Cost Savings	✓	
Improves overall HVAC system performance	✓	
Proven technology used for decades		✓

\* more affordable within smaller systems



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