THE IMPORTANCE OF INDOOR AIR QUALITY

The relationship between poor indoor air quality (IAQ) and both short- and long-term adverse health effects has long been established. Despite the importance of breathing clean indoor air, many of us are often unknowingly exposed to poor IAQ regularly, underscoring the importance of taking proactive steps to improve IAQ and minimize our exposure to indoor air pollutants. A first line of defense of any comprehensive strategy to address IAQ includes air filters in a building's HVAC system.

IAQ experts recommend using at least MERV-13-rated filters for better filtration of particulate matter (PM). But higher-rated filters present several challenges. First, they are often much more expensive, and the costs of replacing and maintaining them can add up quickly, as filters must be regularly replaced (up to four times a year). Additionally, all filters — regardless of their efficiency rating — often struggle to capture microscopic and submicroscopic particles, including many common viruses and bacteria.

One way to improve filter performance and reduce airborne PM is by adding a complementary air-cleaning technology as part of a multilayered approach. Ionization provides a cost-effective solution that doesn't compromise filter performance or IAQ; in fact, it is shown to improve both.

IMPROVE YOUR INDOOR AIR QUALITY WITH NEEDLEPOINT BIPOLAR IONISATION TECHNOLOGY

GPS® patented NPBI technology works to improve IAQ by targeting airborne particles including certain odors, viruses and bacteria. NPBI technology introduces ions into a space via the existing HVAC system. When these ions disperse throughout a space, they seek out and form bonds with particles in the air through a process called agglomeration. This creates a snowball effect in which particles begin to cluster together. The larger a cluster of particles becomes, the easier it is for an HVAC system to filter it out of the air. In addition to this clustering effect, contact with ions also inactivates certain viruses and bacteria.

DM-2™

The DM-2 is the auto-cleaning NPBI™ system designed for indoor duct mounting. Its low-profi le design allows for mounting in proximity to the occupied space, especially when combined with the DM-S™ round-duct mounting accessory.

CI-2™

The CI-2 is an auto-cleaning NPBI system designed to fi t where traditional air ionizers don't, including fan coils, PTACs, ductless mini splits, ceiling cassettes and ducted modules, as well as traditional split systems and air handlers up to 2,400 CFM.

GPS-FC24™-AC

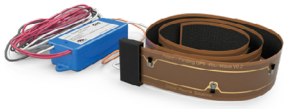
The GPS-FC24-AC is an auto-cleaning, lightweight NPBI system that handles up to 2,400 CFM or 6 tons. Designed for multiple mounting options, including fan inlets, interior duct walls or floors.

GPS-FC48™-AC

The GPS-FC48-AC is an auto-cleaning, lightweight NPBI system that handles up to 4,800 CFM or 12 tons. Designed for multiple mounting options, including fan inlets, interior duct walls or floors.

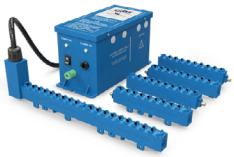
GPS-DM48™-AC

The GPS-DM48-AC is an auto-cleaning, lightweight NPBI™ system that handles up to 4,800 CFM o r 12 tons. Design optimized for mounting into interior duct walls or floors.



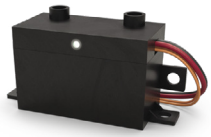
GPS-IRIB®-18/36

The GPS-iRIB is available in 18- and 36-inch lengths. This mechanism is engineered to deliver the highest level of ionization with the least amount of energy in the most compact size.



GPS-IMOD®

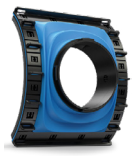
The GPS-iMOD is a modular NPBI system that is fi eld-assembled to any length up to 240 inches in 6-inch increments. Designed for mounting in air handling units, the iMOD is ideal for preventing buildup on evaporator coils.



GPS-FC-3-BAS

The GPS-FC-3-BAS unit is designed to be mounted inside of fan coils, heat pumps, PTACs, ductless mini splits and air handlers up to 3,200 CFM or 8 tons. Its compact size and simple mounting requirement allow it to be mounted almost anywhere in just a few minutes.

ACCESSORIES



DM-S™

The DM-S is a single, adaptable saddle solution for installing the DM-2™ onto varying round-duct diameters of 6 inches and up. The DM-S saddle installation accessory is sold separately from NPBI™ systems.

PS-2™

The PS-2 is a single-power transformation solution for compatible GPS ionizer products.

GPS-IMEASURE

The GPS-iMEASURE is the fi rst commercially available ion detector that can be permanently mounted in the space to measure ion levels in real time and report back to a building management system.

GPS-IMEASURE-D

The GPS-iMEASURE-D ion detector is permanently mounted in the duct downstream of any GPS® ionization device. It measures ion levels in real time and reports back to a BAS. It includes three sensitivity levels — 20,000, 200,000 or 2,000,000 ions/cc — that can be set based on the application and in-duct location.

GPS-IDETECT-P

The GPS-iDETECT-P is a plenum-mounted ionization detector that confi rms the output from the GPS-iMOD® system. The GPS-iDETECT-P provides the ability to monitor ionization status in a plenum to confi rm that the ionization equipment is working properly.

GPS-NEMA4-OE

The GPS-NEMA4-OE is a NEMA 4X-rated fi berglass enclosure designed to house one GPS-iMOD power supply. The panel adds a superior fi nished look to any project while providing the required protection against foreign substances, such as water and dust, when power supplies are mounted in a non-NEMA 1–rated environment.