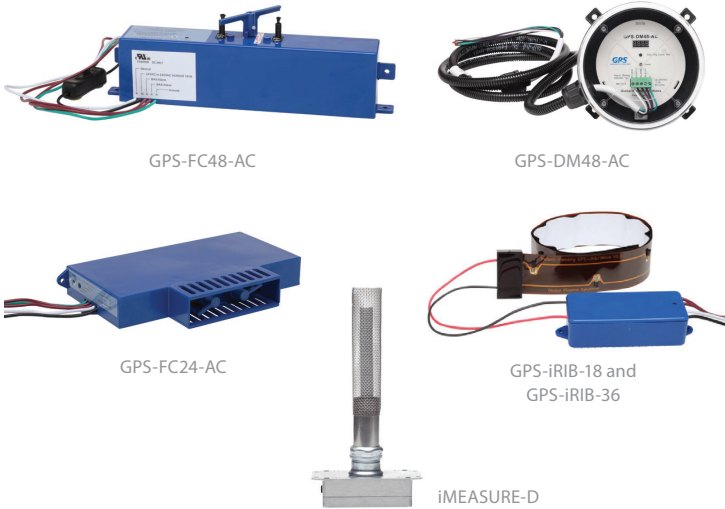


GPS SERIES

Needlepoint Bipolar Ionization Systems



An ion is a molecule or atom that is positively or negatively charged, meaning it must either gain or relinquish electrons in order to become neutral. Naturally occurring ions are everywhere in the outdoors, and they are constantly working to clean the air. Ions are created with energy from rushing water, crashing waves and even sunlight.

Needlepoint Bipolar Ionization (NPBI) technology cleans indoor air by generating ions without producing ozone or other harmful by-products, so you can bring outdoor freshness to the indoors. This patented technology produces a high concentration of positive and negative ions, delivering them to the space via the ventilation system. Within the air stream, ions attach to particles, where they combine, become larger and are more easily filtered from the air. When ions come in contact with pathogens, they disrupt the pathogens' surface proteins, rendering them inactive. Five separate in duct ionization systems to fit your application are offered.

The iMEASURE-D Duct Ionization sensor allows for monitoring of levels of ionization in the air. Higher ionization levels means fewer active pathogens and larger particles more easily filtered out of the air.

SPECIFICATIONS

IONIZATION SYSTEMS

Input Voltage	GPS-FC and GPS-DM models: 24 to 240 Vac; GPS-iRIB models: 110 to 240 Vac
Power	GPS-FC24-AC: 8 Watts; GPS-FC48-AC: 10 Watts; GPS-DM48-AC: 12 Watts; GPS-iRIB: 5 Watts
Frequency	50/60 Hz
Ion Output	GPS-FC48-AC/GPS-DM48-AC: >400 million ions/sec; GPS-FC24-AC: >300 million ions/sec; GPS-iRIB: >35 million ions/sec per foot
Airflow Capacity	GPS-FC48-AC/GPS-DM48-AC: 4800 CFM / 12 Tons; GPS-FC24-AC: 2400 CFM / 6 Tons; GPS-iRIB: 3200 CFM / 8 Tons

Reduces particles

Particle reduction and smoke control

Neutralizes odors

Odors neutralized by destroying VOCs

Reduces pathogens

Kills pathogens (bacteria, viruses, mold), helps to control allergens/asthma, prevents Dirty Sock Syndrome

Saves energy

Energy savings of up to 30% by reducing outdoor air intake, reducing pressure loss by keeping coils clean without an expensive UV system, and requires no maintenance

APPLICATIONS

- Healthcare
- Schools and universities
- Manufacturing
- Office buildings
- Airports
- Food service
- Fitness
- Arenas and stadiums
- Hospitality
- Worship

Status Display	GPS-DM48-AC: LCD display indicates relay status and is used for adjustment of auto-cleaning frequency; GPS-FC models: Single LED indicates relay status and is used for adjustment of auto-cleaning frequency; GPS-iRIB models: Single LED indicates relay status
Alarm Relay Rating	250 Vac / 1A, N.O. (close when powered with no faults)
Operating Temperature Range	GPS-FC and GPS-DM models: -20 to 200 °F (-29 to 93 °C); GPS-iRIB Models: -40 to 140 °F (-40 to 60 °C)
Auto-Cleaning	GPS-FC and GPS-DM models only: Mechanical wiper, default setting brushes every three days

IONIZATION SENSOR

Mounting Location	Duct
Input Voltage	12 to 24 Vac / Vdc
Current draw	100 mA max.
Sensor Range	0 to 20K, 0 to 200K, 0 to 2M Ions/cc (jumper selectable)
Sensor Output	0 to 10 Vdc
Power	<2 Watts
Operating Temperature Range	-20 to 140 °F (-4 to 60 °C)
Humidity Range	0 to 99% RH, non-condensing

WARRANTY

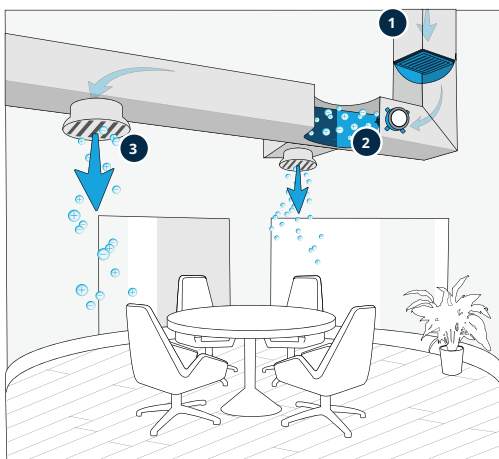
Limited Warranty	
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AGENCY APPROVALS

Agency Approvals	UL867, OSHPD Seismic (OSP), IAQP, CE
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APPLICATION DIAGRAM

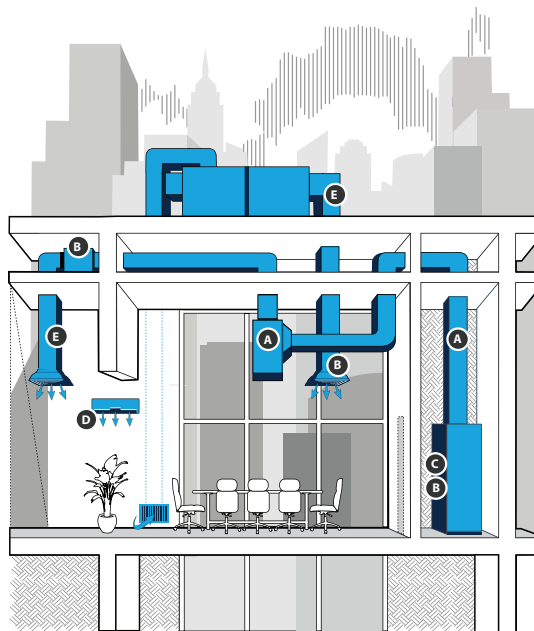


In-room ion density is dependent on a variety of factors, including proximity of the ionizing equipment to the occupied space, air flow rates and path of the ductwork within the building.

- Step 1:** Conditioned air flows into the distribution duct system.
- Step 2:** Air is ionized by the GPS device.
- Step 3:** Positive and negative ions are delivered into the environment.

INSTALLATION EXAMPLES

From Air Handling Units to fan-powered boxes, Veris has the solution.



- A: DM48
- B: FC24
- C: FC48
- D: iRIB 18/36
- E: IMEASURE-D

DIMENSIONS

MODEL	L	W	H	INSERTION DEPTH	INSERTION DIAMETER
GPS-DM48-AC	9.0"	7.75"	7.75"	7.0"	3.75"
GPS-FC48-AC	11.1"	1.84"	3.52"		
GPS-FC24-AC	7.9"	1.1"	5"		
GPS-iRIB Power Unit	3.75"	1.75"	1.0"		
GPS-iRIB-18 Ionizer Strip	18.0"	1.5"	0.05"		
GPS-iRIB-36 Ionizer Strip	36.0"	1.5"	0.05"		
GPS-iMEASURE-D	12.1"	6.2"	3.25"	10.5"	2"

AUTO-CLEANING TECHNOLOGY

Auto-cleaning technology ensures sustained ion output over time. Ion output can decrease without this feature, in addition to accumulation of humidity and other material build-up. Competitive products and brushes must be manually cleaned, and while, a simple process, this rarely occurs. The auto-cleaning feature performs regular wipes of emitter brushes, which prevents build-up. The resulting benefit is optimal lifetime performance.



ORDERING INFORMATION

MODEL	DESCRIPTION	MOUNTING LOCATION	DISPLAY	SELF-CLEANING	AIRFLOW CAPACITY
GPS-DM48-AC	Duct ionization system	Through duct wall	LCD	X	4800 CFM / 12 tons*
GPS-FC48-AC	Duct ionization system	Duct wall, duct floor, fan inlet		X	4800 CFM / 12 tons*
GPS-FC24-AC	Duct ionization system			X	2400 CFM / 6 tons*
GPS-iRIB-18	Flexible ionization strip	Traditional split systems, PTACs, fan coils, air handlers, ductless mini splits, ducted modules, ceiling cassettes			3200 CFM / 8 tons*
GPS-iRIB-36	Flexible ionization strip				3200 CFM / 8 tons*

* Multiple units can be combined to meet system air capacity requirements.

MODEL	DESCRIPTION	MOUNTING LOCATION	OUTPUT RANGE	SENSOR RANGE	AIRFLOW CAPACITY
GPS-iMEASURE-D	Duct ionization sensor	Duct wall, duct floor, fan inlet, AHUs	0 to 10 V	0 to 20K, 0 to 200K, 0 to 2M ions/cc (selectable)	1,000 to 100,000 CFM

