

PCA Ion Generator BGSE-150-BPIM

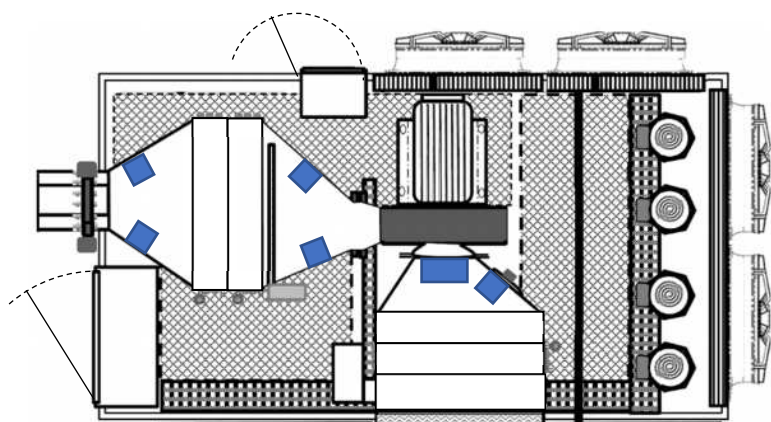


Airflow Sanitizing Bipolar Ion Generator

- ✦ **Inactivates Pathogens** (viruses, bacteria, mold)
- ✦ **Neutralizes Odors** caused by VOCs (fuel and chemicals)
- ✦ **Reduces Particulates** suspended in the airstream

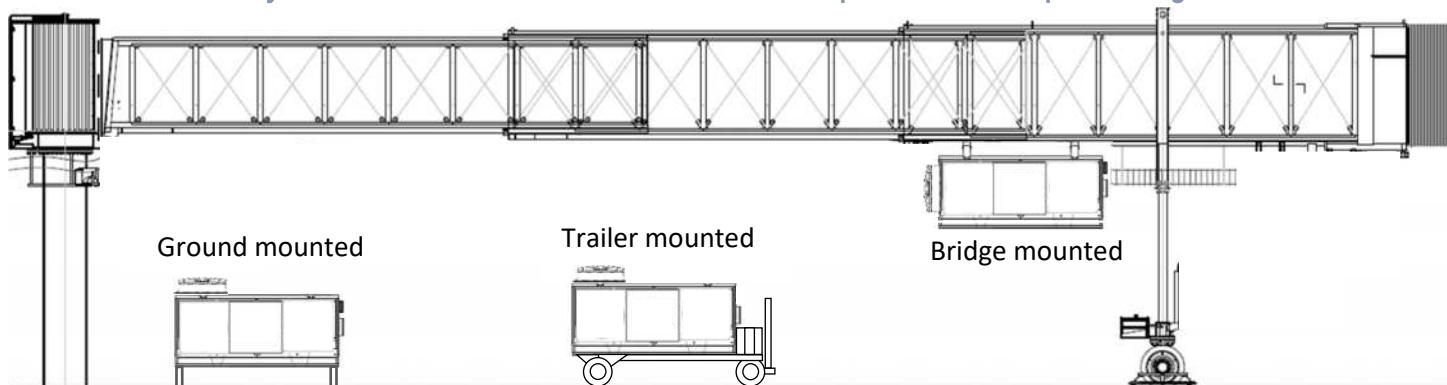
Effective for
the COVID-19
Virus

Multiple installation locations
and airflow options



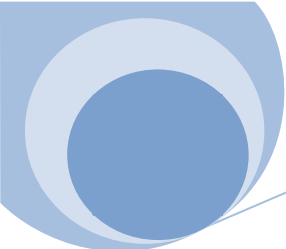
Suitable for new equipment and field retrofits – all makes, all models, fixed or mobile!
For Central System AHUs or PoU DX Units

Easy installation ✦ No control interface required ✦ Multiple Voltages



Exclusive Worldwide Distributor

BGSE GROUP LLC
14034 Clarendon Point Court
Huntersville, NC 28078
United States of America
sales@bgsegroupp.com
+1 (704) 488-0084



BGSE-150-BPIM Bi-Polar Ionization Module

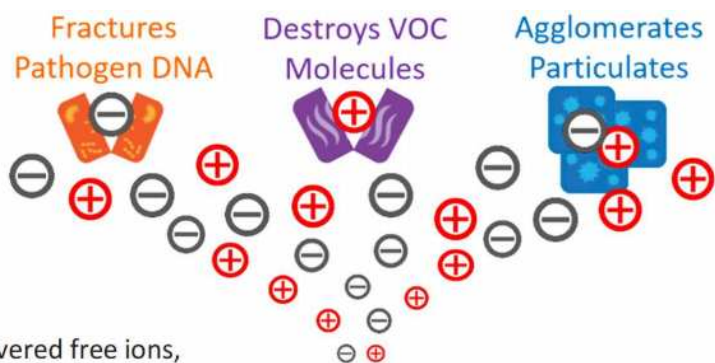
Product Description

The BGSE-150-BPIM is an autocleaning, zero-maintenance, needlepoint bipolar ionization system designed to handle up to 150 tons of airflow. The **generated ions inactivate microbes and reduces odors in the airstream and the conditioned space.**

Features

All-composite and carbon fiber construction, universal voltage input, in-line On/Off switch, programmable auto-cleaning cycle, plasma on indication light, alarm contacts, mounting magnets and replaceable carbon fiber brush emitters*.

*Life cycle testing shows no mechanical degradation of the carbon fiber brushes due to repeated cleaning cycles



Options

Ion detector for one-time or real-time confirmation of delivered free ions, and BAS communication of system status.

Benefits

- Inactivates Pathogens (Viruses, Bacteria, Mold), Helps Control Allergens/Asthma**
- Neutralizes Odors by destroying VOCs**
- Reduces Particles and Smoke***

*These statements are based on numerous customer testimonials and have not been evaluated by the FDA.

Specifications

Input Voltage	24VAC to 240VAC
Amps	0.41A to 0.041A
Power	10 Watts
Frequency	50/60HZ
Total Ion Output	> 400 Million ions/cc/sec
Airflow Capacity	Up to 150 tons of airflow
Temperature/Humidity	-20°F to 200°F / 0-100% RH
Unit Dimensions/Weight	11.1"L x 1.84"W x 3.52"H / 1.32 lbs
Electrical Listings	UL, cUL, CE
Alarm Contact Rating	250VAC/ 1A
Compliance & Certifications	UL 867, OSHPD Seismic (OSP), IAQP



The BGSE-150-BPIM is designed to be maintenance free, thanks to the patent-pending self-cleaning system.

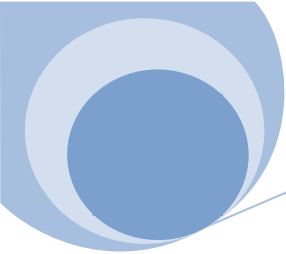
Multiple installation options are possible due to the auto-detecting universal voltage input module, and the magnetic mounting tabs, which allow tool-less mounting and repositioning in the ductwork.

The system is designed for full wash-down capability without damage or deterioration.

Exclusive Worldwide Distributor

BGSE GROUP LLC
 14034 Clarendon Point Court
 Huntersville, NC 28078
 United States of America
 sales@bgsegroup.com
 +1 (704) 488-0084





Reducing the Spread of Disease Through Needlepoint Bipolar Ionization (NPBI) Technology

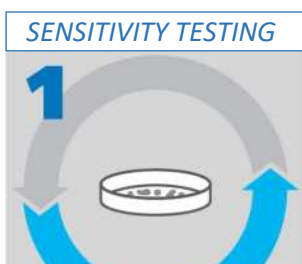


Inactivates Pathogens – When ions come into contact with pathogens, they steal away hydrogen from the pathogens, destroying its DNA and reducing the infectivity of the virus.

Clears the air of particles faster – Particulate matter includes pollutants, dust, allergens, mold, bacteria – and viruses. NPBI technology generates a high concentration of positive and negative ions that travel through the air continuously seeking out and attaching to particles. The agglomerated particles are more easily captured by the ventilation and filtration systems or become too heavy and cannot remain suspended in the air.

Safe – NPBI is safe to use across all commercial, industrial, and residential applications. Traditional bipolar ionization systems produce harmful ozone as a byproduct, but NPBI is OZONE FREE.

Performance Validation



A petri dish containing a pathogen is placed under a laboratory hood, then monitored to assess the pathogen's reactivity to NPBI over time.
Controlled environment for comparing different pathogens.



Counts of airborne pathogens are taken before and after aerosolizing them into a sealed laboratory environmental room installed with NPBI.
Larger space simulates a real-world environment.



Measurements in real applications can be compared in spaces with and without NPBI, or the same space before and after NPBI.
Pathogens occur normally, not introduced specifically for testing.

Pathogen Tested:
SARS-CoV-2, the virus that causes "COVID-19"
Date: 5/27/2020
Laboratory Name:
Innovative Bioanalysis
Cap Lic No: 9501843

Time	% Inactive
10 minutes	84.2%
15 minutes	92.6%
30 minutes	99.4%

Norovirus TIME IN CHAMBER: 30 MINUTES RATE OF REDUCTION: 93.5% <small>Pathogen: Norovirus, actual test used for Home Calculator, ATC 93-762, Issue 1-8</small> ATS LABS	Tuberculosis TIME IN CHAMBER: 60 MINUTES RATE OF REDUCTION: 69.0% EMBL	Major Medical Center 6 TEST ROOMS vs. 6 CONTROL ROOMS GRAM NEGATIVE RODS REDUCED TO 0 ISOLATED PATHOGENS 64%-99% LESS PER DAY LOWER AVERAGE CFU THROUGHOUT TEST PERIOD
Human Coronavirus TIME IN CHAMBER: 30 MINUTES RATE OF REDUCTION: 99.4% <small>Human Coronavirus: SARS-CoV-2</small> INNOVATIVE BIOANALYSIS	MRSA TIME IN CHAMBER: 30 MINUTES RATE OF REDUCTION: 96.2% EMBL	Air Travel Command Center BEFORE vs. AFTER 1 MONTH PARTICLE REDUCTION 0.3µm -- 87.2 % 0.5µm -- 95.4 % 1.0µm -- 95.8 %
Legionella TIME IN CHAMBER: 30 MINUTES RATE OF REDUCTION: 99.7% EMBL	Staphylococcus TIME IN CHAMBER: 30 MINUTES RATE OF REDUCTION: 96.2% EMBL	
Clostridium Difficile TIME IN CHAMBER: 30 MINUTES RATE OF REDUCTION: 86.8% EMBL	E.coli TIME IN CHAMBER: 15 MINUTES RATE OF REDUCTION: 99.6% EMBL	