Benchtop Ionizing Blower

MODEL 6442

The Benchtop Blower Model 6442 features an adjustable two-speed fan for varying applications and operating conditions for high performance electrostatics management. The small footprint of the Model 6442 allows the ionizer to occupy much less workspace than traditional bulky blowers. With its universal mounting bracket/stand, the unit can be used to control static charge in virtually any location.

The Model 6442 features IsoStat technology1 for intrinsically balanced ionization, eliminating the need for periodic calibration regardless of variations in line voltage or fan speed. It controls static charge wherever contamination, electrostatic discharge (ESD), material-handling problems, or microprocessor lock-up are concerns in the manufacturing environment.

Features and Benefits

- Patented IsoStat® technology
- Self balanced; no calibration needed
- Steady-state DC ion emission
- Efficient ion delivery at the workstation
- Auto-Clean System
- Reduces manual emitter point cleanings
- Alarm relay closure circuitry
- Alarm notification output communicates system failure to a remote location
- Multicolor LED indicator
- Visual performance indicator: green for normal operation and red signals a catastrophic alarm

1. U.S. Patent No. 5,055,963
### Specifications

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<th>Benchtop Ionizing Blower Model 6442</th>
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| **Operating environment**           | Temperature: 68–77°F (20–25°C)
|                                    | Humidity: 30-50% RH (non-condensing) |
| **Dimensions**                      | 10.5H x 7.6W x 5D inches (26.67H x 19.3W x 5.7D cm) |
| **Weight**                          | 3.4 lb (1.36 kg)              |
| **Warranty**                        | 2-year limited warranty       |
| **Certifications**                  |                                |

*Tested in accordance with ANSI/ESD STM3.1-2000

### Auto-Clean System

The Auto-Clean System features a brush mechanism that sweeps the emitter points when the blower is turned off and on, allowing the Model 6442 to always perform at optimum ion output and balance. This automated feature results in reduced operation costs due to lower maintenance.

During operation of the fan, the brush automatically retracts to prevent emitter point wear. The Auto-Clean System brush will extend as the fan slows to a stop. Ion recommends activating the Auto-Clean System at least once a week. Cleaning schedules will vary depending on environmental conditions and application requirements.

### Applications

The Model 6442 reduces ESD damage and improves product flow for sensitive electronic components in areas such as:

- Electronics assembly
- QA inspection
- IC packaging and marking
- Surface-mount equipment
- Robotic workstations
- Computer stations
- IC insertion equipment
- Printing presses
- Film processing

### Patented IsoStat Technology

Ion’s patented IsoStat technology is the first balancing technology for ionizers to guarantee intrinsically balanced ionization and elimination of complicated feedback circuits. IsoStat is based on a law of physics, Conservation of Charge, which states that charge cannot be created or destroyed in an isolated system. By isolating the ionizer’s emitter points from ground, IsoStat ensures equal numbers of positive and negative ions. Characteristics of IsoStat ionizers include:

- Ionizers never need calibration and require very little maintenance
- Small size and operation without grounding wires

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1. U.S. Patent No. 5,768,087