

7.1. Workstation Ionisers

6212 Benchtop Ionising Blower

This model provides an excellent workstation coverage and a high level of ESD protection. It has been specifically designed to meet the demanding performance requirements in applications such as: **semiconductor manufacture, electronic assembly & testing, optics, medical device manufacture** and packaging, wave soldering.



Properties

- Balance (typical): ± 10 volts
- Static decay time: < 2.5 s at 305 mm distance and maximum fan speed (1000 volts zu 100 volts)
- Air volume: 15 ... 20 l/s (33 ... 45 cfm)
- Dimensions: 160 mm * 160 mm * 95 mm
- Out of balance indicator and alarm
- Removable pins

Code

6212.001 Benchtop Ionising Blower 6212

6225 Overhead Ionising Blower

The model 6225 provides a high level ESD protection with excellent workstation coverage, „quiet“ operation and ease of maintenance.

Standard lengths of **600 mm, 1000 mm, 1200 mm** are available to suit the specific application. The model is provided with an extensive range of features and operations.



Properties

- Balance (typical): ± 5 volts
 - Static decay time: < 4 s at 457 mm and maximum fan speed
- | | | | |
|---------------|------------------------------------|------------------------------------|------------------------------------|
| ● Lengths: | 600 mm | 1000 mm | 1200 mm |
| ● Air volume: | 3.60 m ³ /min (130 cfm) | 6.90 m ³ /min (241 cfm) | 9.00 m ³ /min (322 cfm) |
| ● Coverage | 800 mm * 600 mm | 1200 mm * 600 mm | 1400 mm * 600 mm |

Code

6225.006 Overhead Ioniser 6225 – length: 600 mm

6225.010 Overhead Ioniser 6225 – length: 1000 mm

6225.012 Overhead Ioniser 6225 – length: 1200 mm

7.2. Special Ionising Devices

7.2.1. Ion Gun

The Ion Gun is a robust, lightweight injection moulded product for use with the Model 6233 pulsed DC controller. It is suitable for contamination blow-off and neutralisation of static charges in electronic applications and clean room environments. It is quick, easy and safe to use.

Features

- Low noise level
- Ergonomically contoured body
- Fast decay time
- High blow-off force
- Low air consumption
- Moulded hanging hook
- For use with compressed air or nitrogen
- Suitable for use in clean rooms

Properties

- Balance (typical): ± 10 volts
- Static decay time: < 0.5 s at 150 mm distance and 2 bar (1000 volts to 100 volts)
- Voltage: 8 kV DC nominal (Model 6233)
- Maximum pressure: 7 bar (100 psi)
- Typical pressure: 1.5 ... 3 bar (20 ... 40 psi)
- Length: 190 mm
- Weight: 160 g
- Supplied with 2 cables (2 m) as standard



Code

6251.001 Ion Gun

7.2.2. Pulsed DC Controller Model 6233

The 6233 Pulsed DC Controller includes all control features for the existing models (variable ion balance and adjustable frequency) and introduces additional functions with increased frequency (0.1 Hz to 20 Hz).

Properties

- Input voltage: 24 V DC
- Output voltage: 120 μ A
- Dimensions: 94 mm * 157 mm * 35 mm
- Main output: 2.5 mm jack socket
- Remote HV switch: 3.5 mm banana jack
- Power: 5 W
- Air connection: 6 mm diameter



Code

6233.001 DC Controller

7.2.3. Ion Nozzle

The Ion Nozzle is a small, lightweight Ioniser, which was developed for the use with the 6233 Pulsed DC Controller. It's suitable for the installation in machines and equipments, which are used inside of electronic manufactures or clean rooms. It can be installed quickly. It is easy and safe to use.

Features

- Aerodynamically contoured body
- Replaceable titanium emitters
- Fast decay time
- Low air consumption
- Optional: hanging hook
- For use with compressed air or nitrogen
- COSHH compatible

Properties

- Balance (typical): ± 10 volts
- Static decay time: < 0.5 s at 150 mm distance and 2 bar (1000 volts to 100 volts)
- Power: 8 kV DC nominal (Model 6233)
- Maximum pressure: 7 bar (100 psi)
- Typical pressure: 1.5 ... 3 bar (20 ... 40 psi)
- Length: 66 mm
- Diameter: 30 mm
- Weight: 60 g
- Air connection: 6 mm diameter

Applications

- Semiconductor manufacture machinery
- Electronic assemblies and testing
- Optical devices
- Inspection equipments
- Production of medical devices
- Packing machines
- Lithography machines



Code: 6261.001



Code: 6261.002



Code

6261.001 Ion Nozzle – standard

6261.002 Ion Nozzle – flexible

7.2.4. Ion Bar

The Ion Bar was designed specifically for the electronic industry and clean rooms. It eliminates electrostatic charges. The special profile minimizes air turbulences and enhances the stiffness along the ion bar length. It also eliminates dust traps, which are often a problem for similar equipments.

Features

- Slim body
- Modular design, allows multiple bar installation
- Cleaning function for emitters, which are used in clean room
- Replaceable titanium emitters
- Integrated mounting for the fast and easy installation
- Simple plug connection
- Optional: air pressure connection

Properties

- Balance (typical): ± 10 volts
- Static decay time: < 1.0 s at 300 mm distance, no air (1000 volts to 100 volts)
- Power: 8 kV DC nominal (Model 6233)
- Gas pressure: 1 bar max. 0.8 bar expected
- Length: 200 mm ... 1400 mm (200 mm extension pieces available)
- Maximum length: possible up to 3,60 m
- Dimensions: 63.5 mm * 45.3 mm * length



Code

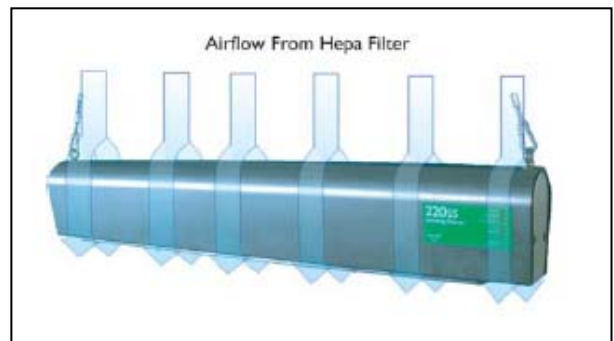
6241.001 Ion Bar

7.2.5. Overhead Ionising Blower for Clean Rooms

The new Ionising Blower has been developed specifically to meet the stringent environmental criteria for cleanrooms. It represents a brand new concept in ionising blowers, a new **patented** system. The use of specially modified cross flow fan technology to replace conventional axial fans provides effective laminar air flow, increased air volumes and higher air velocities. The Ionising Blower has also a sensor option and an interface for the data transfer.



The blower meets the stringent environmental criteria defined for high specification cleanrooms. It can be called as **high end device** and can also be used for:



Electronic Industry, Hard Disk Drive Manufactures, Semiconductor Applications

Properties

- Chassis: stainless steel
- Dimensions: 125 mm * 175 mm * 1045 mm
- Input voltage: 110 V/240 V
- Emitter pins: titanium
- Typical decay time: 1000 V to 100 V less than 3 s at 450 mm
1000 V to 10 V less than 5 s at 450 mm
- Typical balance: ± 2.0 V
- Ozone: less than 0.01 ppm
- Coverage: 600 mm * 1200 mm
- Weight: 10.5 kg
- Air volume: 1000 cfm at maximum speed
- Noise level: 47 dBA at a distance of 1 m

Code

6220.001 Overhead Ionising Blower for Clean Rooms

7.3. Measurement and Testing Instruments for Ionisation

7.3.1. PFK-100 Instrument Set

Electrostatic fields can be measured and analysed with this instrument set as well as the Ioniser function. The voltage generation of materials, equipments and persons can be assessed.

The set includes:

- an **Electrostatic Field Meter PFM-711 A**
- a **Charge Plate Monitor Assembly CPM-720**
- a **Charging Source PCS-730 (± 1 kV)**

Code

8100.100 PFK-100 Instrument Set



7.3.2. PDT-740B – Static Decay Timer

The static decay timer is designed to measure the time, which is needed to discharge materials from 1000 volts to less than 100 volts, 50 volts, 10 volts.

This useful device can be connected with the electrostatic field meter PFM-711 A and the CPM-720 A to evaluate the Ioniser decay time.

Code

8100.740 PDT-740B - Static Decay Timer

