RANSFORMING TECHNOLOGIES

OUTSTANDING ALTERNATIVES IN STATIC CONTROL

SCION[™] IN1200 Ion Bar Square Wave AC Technology

High Performance, Versatile Ionizing Bars

The Scion[™] series 1200 ionizing bar is an effective tool for eliminating static charges in manufacturing environments, including Semiconductor, Electronic Assembly, Medical Device, Optics and Pharmaceutical

Scion[™] ionizing bars feature a small footprint and easily integrates into most applications. The aerodynamic design is compatible with laminar airflow in clean rooms. Scion™ ionizing bars also come equipped to use compressed air or nitrogen for applications requiring airflow to accelerate ion mobility.

AC Square Wave Technology

Using AC Square Wave Technology, the Scion[™] series ionizing bars increase air conductivity and continuously deliver a balanced stream of bipolar ions to the intended target.

The versatile Scion[™] ionizing bar is optimized using a remote controller which powers the device, sets the ion switching frequency and controls the

ion balance. Multiple switching frequency choices and duty cycle adjustments make the Scion[™] series 1200 ionizing bars very useful in a wide range of applications.

Available in four different lengths: 12", 22", 44" and 64".

External Display

An external display is available which displays the bars settings. View the current switching frequency and duty cycle settings and adjust them to fit your specific application. Without the display, a charge plate monitor is recommended to

Applications:

Scion[™] series 1200 ionizing bars are a highly effective tool for static control in electronics, plastics, chemicals, printing, textile, optical, pharmaceutical and other industries with electrostatic control requirements. Typical applications include clean rooms, laminar flow benches, glove boxes, conveyors and electronic assembly equipment.

This document is prepared for our customers as a service, and is to the best of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing before determining that products mentioned are suitable.

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Ionization



Superior Ionization Uniformity and

Coverage Over the Work Area

- Unique aerodynamic design Ö
- **Remote Control Operation** C
- **Performance Controls For Optimal Balance and Decay Times**
- **External Display Available to View Frequen**cy and Duty Cycle

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Set Up Is Simple, Easy, Fast!

There are two settings on the ion bar that can be adjusted: Working Frequency and Duty Ratio. Adjustments are made to fit your application or ion bar setup and are completed with the SCION remote control.

Pulse Frequency Adjustments

The SCION uses alternating current to produce ions. The pulse or switching frequency is the speed (measured in Hz) at which the ion bar makes a full cycle from the positive current to the negative. The bar can be adjusted from 1Hz (slowest) to 50Hz (fastest). The Working Frequency used depends on the distance the charge is from the bar, airflow available and pressure if airflow assist is used. A slower switching frequency increases the distance that the ions travel from the bar and works with lower airflow. A faster switching frequency is used when the charge is close to the bar and in high airflow applications.

Duty Ratio

Positive Ions

Negative lons

The duty ratio regulates the balance of positive and negative ions that the ion bar produces by skewing the pulse cycle. For

most situations, the ideal average balance should be as close to 0 as possible. The duty cycle is typically set at 50% positive and 50% negative. You can fine tune balance of positive ions with the SCION remote using the "IB+" and "IB+" buttons.

20hz

30hz

50hz

10hz



3hz

5hz

1hz

Adjustments

1Hz - Slowest

50Hz - Fastest

3Hz 5Hz 10Hz 20Hz

30Hz

You can adjust the percentage of positive vs negative ion generation in the cycle. For example: a duty cycle of 50% positive would equal 50% negative; If you increase the positive by 20%, the duty ration would be 70% postive and 30% negative. Duty cycle adjustments optimize ion balance, compensating for difference in ion mobility and other influences.

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IN1200 Ionizing Bar

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IN1200 Ionizing Bar

Benefits of SCION IN1200

Scion[™] ionizing bars use AC square wave ionization technology that produce positive and negative ions from every emitter point. Each emitter point is bipolar, instead of polarity dedicated emitter points. Bipolar emitter points offer unique benefits over Pulsed DC ionizers.

Benefits of Scion[™] Ionization vs Pulsed DC Ionizers

- Superior ion balance.
- Faster decay times.
- Emitter points that stay cleaner.
- Emitter points that last longer.
- Easy adjustment for a wide range of applications.
- Stable long-term performance.

Mounting the SCION IN1200

The SCION IN1200 comes with simple to use E-Z mount clips that slide into grooves on the body of the ionizer. Use screws to secure the E-Z mount to the desired location.

Display Terminal

Use the IN1200D display terminal to view the bar settings and to assist with changing the bar's setting to fit your application. Sold separately.

emitter TRANSFORMIN

Friendly Ionizer Easy electrode probe replacement via the patented molded





About Transforming Technologies

Since 1998, Transforming Technologies has helped electronic manufacturing facilities to protect their products and processes from the many serious problems associated with static electricity.

Transforming Technologies offers a wide range of unique and outstanding products to detect, protect, eliminate and monitor electrostatic charges. Our products are integral components of an effective static control program.



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Model IN1200	Specifications
Power Input	AC 100V~240V, 50/60Hz
Output Voltage	DC <u>+</u> 5.00(KV)
Output Frequency	5, 30Hz (default)
Balance	<u>+</u> 30 volts
Decay Time	1000V—100V, < 2 seconds @12"
Duty Factor	10%-90%
Humidity	70% RH (non-condensing)
Power	10W
Indicators	Power: Green LED, Alarm: Red
Controls	Remote Control
Mounting	EZ Mount Brackets
Emitter Points	Tungsten Alloy
Weight	
IN1200-12	1.5lbs
IN1200-22	2.5lbs
IN1200-44	4lbs
IN1200-64	5.5lbs
Gas Connection	1/4" quick release tube fitting
Warranty	1-year limited warranty

Tested in accordance to ANSI/ESD STM3.1