

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

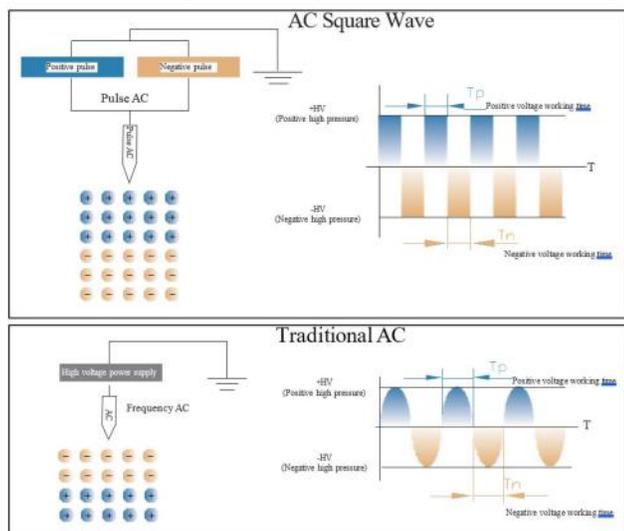
Scion™ ionizing bars feature a small footprint and easily integrates into most applications. The aerodynamic design is compatible with laminar airflow in clean rooms. Scion™ ionizing bars also come equipped to use compressed air or nitrogen for applications requiring airflow to accelerate ion mobility.

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 applica-



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.



Features

- AC Square Wave ionizing technology
- Unique aerodynamic design
- Remote Control Operation for easy adjustments
- Performance Controls For Optimal Balance and Decay Times
- Equipped with malfunction alarm

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





IN1200 Ionizing Bar

Set Up Is Simple, Easy, Fast!

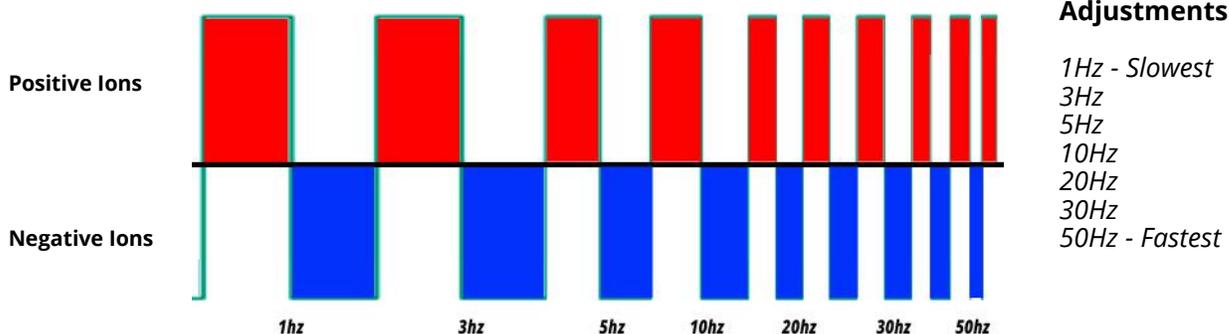
There are two settings on the ion bar that can be adjusted: Working Frequency and Duty Ratio. Adjustments are made to fit your application or ion bar setup and are completed with the SCION remote control.

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.

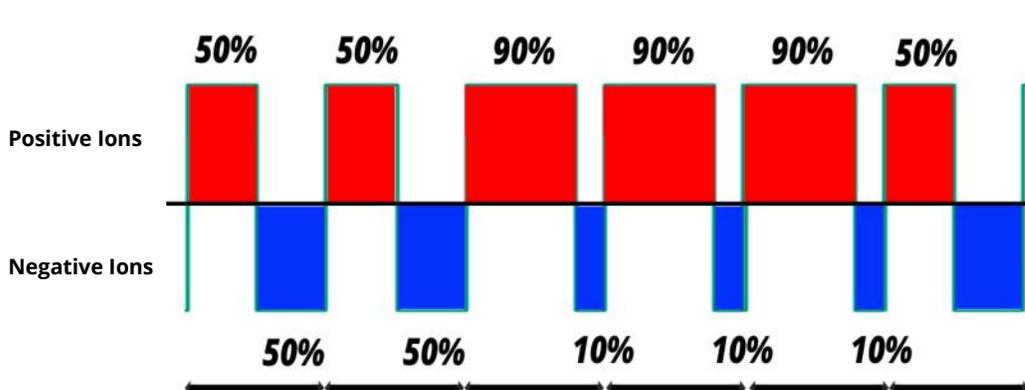
Duty Ratio

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.

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Adjustments

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% positive and 30% negative. Duty cycle adjustments optimize ion balance, compensating for difference in ion mobility and other influences.

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.

External Display

An external display is available which displays the up to four ion 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 assist with the bar settings



Mounting the SCION IN1200

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



Maintenance Friendly Ionizer Easy electrode probe replacement via the patented molded emitter



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.

Model	IN1200-12, IN1200-22, IN1200-44, IN1200-64
Input voltage	DC 24V
Input Current	<600mA
Power	10W
Output voltage	±5000V±6500V
Ion emission	Pulse AC
Emitter electrode	Tungsten alloy
Output frequency	5,10,30,55,105Hz; (factory setting: 55Hz)
Duty factor	5%—95%
Discharge range	L*W*H: {275-2975(Needle spacing 50mm)} *300*1000mm
Installation distance	100→1000mm
Ion balance	≤ ±30V (AVG)
Discharge speed	≤2S
Status indicator	green light: normal operation, red light: abnormal high voltage blue light: standby, blue light flashing: debugging / cleaning,
Condition monitoring	RS485 communication (can be connected in series for network monitoring)
Air pressure	≤0.6MPa
Air connector	Φ8-G1/8 grey
Media used	Clean compressed air
Working temperature	0°C-50°C
Working humidity	<70%
Dimensions	L*W*H: {275-2975(Needle spacing 50mm)} *36*68.2mm
Bar material	Flame retardant PVC、ABS、SUS、W
Packaging accessories	180°rotatable mounting angle
Power supply	GRT-240200: DC24V 2A, dual network port output, 123*61*40.5mm (L*W*H)
Power cord	2.5m
Warranty	1year
Certification	CE

