



## Ceiling Emitter

### MODEL 5509E

In a matter of seconds, the Model 5509e ceiling ionization system eliminates electrostatic discharge and particle contamination caused by electrostatic attraction. The 5509e ceiling emitters are designed to provide uniform ionization throughout the open areas of a cleanroom. Mounted onto the ceiling surface or inside a flush mount channel, Model 5509e ceiling emitters maintain aesthetics without disrupting cleanroom laminar airflow or compromising the integrity of operating class 1 cleanrooms.

Model 5509e ceiling emitters use pulsed DC ion emission with ion regulation, making output and balance adjustments possible at each emitter. The Model 5509e works with the Model 5024(e) controller.

#### Features


- Low voltage operation (24 VAC)
- Individually adjustable ion emission output
- Feedback with alarms available at each emitter
- Pulsed DC technologies with local and system-wide adjustment controls
- Available with single crystal silicon emitter points

#### Benefits

- Safe, reliable operation
- Balance can be fine-tuned beneath each emitter
- Enhanced performance and stability
- Optimizes ionization efficiency in varying airflows
- Industry standard, cleanest available emitter point material



## Specifications

<b>Input Voltage</b>	24 VAC, 50/60 Hz, 1.25W
<b>Control Signal</b>	±10 VDC control signal from a 5024(e)
<b>Output Voltage</b>	0-18 kVDC, ±10% for each polarity; positive and negative output levels adjusted centrally at controller and locally at each emitter
<b>Output Current</b>	<15 mA; current and voltage limited to eliminate shock hazard
<b>Connectors</b>	Telephone type RJ-11 modular jack receptacle on each end of emitter
<b>Output Control</b>	Each emitter has controls that independently adjust both positive and negative output
<b>Regulation</b>	Output and balance stability is achieved by independently regulating the ion emission voltage of each polarity at each emitter
<b>Timing</b>	Precise timing (0-10 sec) is supplied by the controller. LEDs on each emitter indicate the polarity of the ion emission
<b>Ion Emission</b>	Pulsed DC
<b>Emitter Points</b>	Single crystal silicon, machined titanium or tungsten alloy; all emitter points are replaceable; life varies from 2-3 years depending on material used
<b>Calibration</b>	Annually, semi-annually, or quarterly depending on manufacturing sensitivity
<b>Ozone</b>	<0.005 ppm
<b>EMI</b>	Below background level
<b>Alarm</b>	Visual alarm, red LED located in the middle of the emitter chassis indicates an alarm condition; audible alarm sounds at the 5024e controller when an alarm event occurs at any emitter
<b>Mounting</b>	A variety of surface and flush mounting methods and brackets is available, including cleanroom-compatible interlocking self-adhesive mounts (3M TYPE SJ 3551)
<b>Emitter Rods</b>	Available in 2.5, 5, 10, 15, 24, 36, or 60L in. (63.5, 127, 254, 381, 609, 914, 1524 mm)
<b>Dimensions</b>	1.25H x 1.5D x 17.5L in. (3.2 x 3.8 x 44.5 cm)
<b>Weight</b>	1.4 lb (0.5 kg)
<b>Components</b>	Required Model 5024(e) Controller
<b>Warranty</b>	2 year limited warranty
<b>Certifications</b>	

## Ordering Information

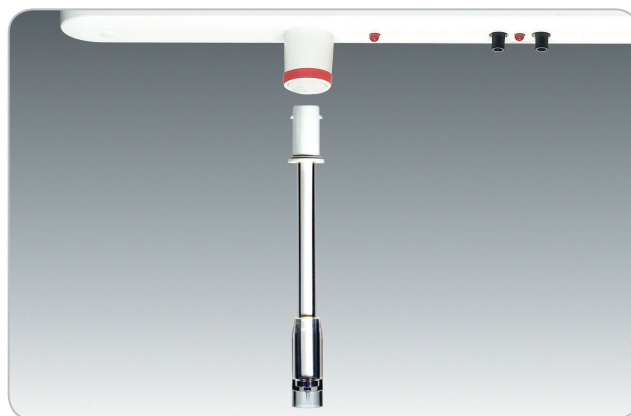
<b>91-5509EC-XX-SDL</b>	Emitter with titanium emitter points in 2.5, 5, 10, 15, 24, 36, or 60 inch rod lengths
<b>91-5509EU-XX-SDL</b>	Emitter with silicon emitter points in 2.5, 5, 10, 15, 24, 36, or 60 inch rod lengths
<b>91-5024-CER</b>	Model 5024 Controller, supports up to 4 emitters
<b>91-5024E-CER</b>	Controller with alarm, supports up to 20 emitters
<b>91-5024E-CE-ALMR</b>	Controller with audible alarm, supports up to 20 emitters

## Designed for Flexibility

The Model 5509e Ceiling Emitter's compact design is compatible with any cleanroom ceiling system, whether surface mounted or recessed. The ionizer's modularity, with removable emitter rods, makes it practical in today's cleanrooms, where equipment is periodically moved.

## Quality to Depend On

In addition to the advanced features mentioned above, the 5509e ceiling emitter represents the same quality and reliability people expect from Simco-Ion. Simco-Ion has set the standard for over 15 years with leading-edge room ionization systems, and industry-best reliability.



*The Model 5509e has several options for emitter rod size. Its modular design makes it easy to exchange one size for another to accommodate a variety of cleanroom conditions.*

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