SIMCO ION™
An ITW Company

Standalone Digital AeroBar®

MODEL 5225S

Simco-Ion's Standalone Digital AeroBar Model 5225S ionizing bar is specifically designed to provide high performance with simple integration and operation. Adjustable and precise, easy-to-use digital settings allow the AeroBar to be used in a multitude of applications, ranging from inside tools to workstations and cleanroom areas. A choice of ionization modes, output voltage and timing, provide versatility to meet static charge neutralization requirements.
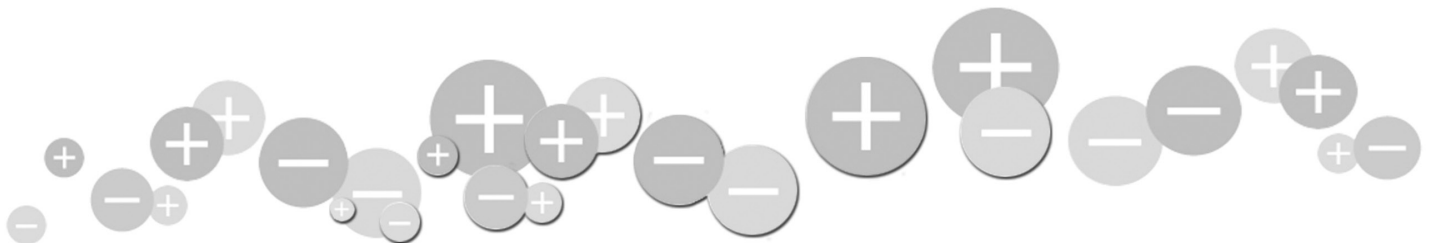
An aerodynamic design and cleanroom-compatible materials allow the Model 5225S to deliver complete and efficient ionization in mini-environments and cleanrooms without disrupting laminar airflow. Handheld Remote enables easy setup and adjustment, and an FMS output permits easy hardwired integration to a facility alarm system.

Features

- All parameters are held within the AeroBar; no controller is required
- Fully adjustable parameters for each AeroBar utilizing Pulsed DC or Steady-state DC modes
- Several AeroBar lengths, including three lengths specifically designed for EFEMs
- Ion current monitoring
- FMS alarm output
- Single-crystal silicon emitter points or titanium emitter points are also available

Benefits

- Continued optimal performance each time the system is powered up
- Ionization can be fine-tuned for individual static charge requirements
- Flexible lengths mean versatility for a variety of applications
- More consistent ion output and stable performance
- Alarm capability for ensured performance
- Ultra-clean emitter point material, with no risk of wafer contamination from dopants or metals

Model 5225S	
Input Voltage	24 VAC, 50/60 Hz, 1W (typ)
Output Voltage	0-20 kVDC, ±10% for each polarity on an individual AeroBar; positive or negative output levels can be adjusted separately with IR Handheld Remote Model 5570
Output Current	<15 µA, current and voltage limited
Connector	RJ-11 modular jack receptacles
Regulation	Output and balance stability is achieved by independently regulating the ion emission current of each polarity at each ionizer
Timing	Both on/off timing for each polarity are settable from 0-10 sec @ 0.1 sec increments; LEDs on the bar indicate the polarity of the ion emission
Ion Emission	Pulse DC, Steady-state DC, or standby
Emitter	Single-crystal Silicon or Titanium, replaceable
Cleanroom Class	ISO 14644-1 Class 1 (Single-crystal Silicon emitter) ISO 14644-1 Class 3 (Titanium emitter)
LED Indicator	Individual red flash on for each polarity; middle red flashes rapidly when in alarm, all 3 blink at once when communication occurs
Ozone	<0.005 ppm
EMI	Below background level
Alarm	Alarm activates when the bar is no longer able to maintain the preset ion output level; alarm is displayed visually by a red LED in the middle of the ionizer chassis; settable threshold alarm limits for predictive maintenance
Maintenance	Annual, semi-annual or quarterly emitter point cleaning depending on process sensitivity and presences of AMCs in environment
Enclosure	ABS plastics, fire retardant
Dimension	2.1"H x 1.2"W x 22.4 / 28.4 / 35.7 / 44.4 / 55.6 / 64.4 / 75.5 / 84.4"L (5.3 x 3.1 x 56.9 / 72.1 / 90.7 / 112.8 / 141.2, 163.6 / 191.8 / 214.4 cm)
Weight	1.13 lb (0.51 kg) for a 22" (55.88 cm) bar (approx. 6 oz per additional ft/0.17 kg per additional 30.5 cm)
Warranty	Two-year limited warranty
Certification	SEMI F47 CE SVHC-folac RoHS2 UKCA

Wall Transformer Kit 33-1422-01	
Input Voltage	120 VAC ±10%, 60 Hz
Output Voltage	24 VAC, 60 Hz @ 500 mA, ±5%
Dimension	3.0"H x 1.9"W x 1.6"D (7.62 x 4.83 x 4.06 cm)
Weight	0.9 lb (0.41 kg)
Certification	c UL us RoHS2

Wall Transformer Kit 33-1432-01 (EU) & 33-1435-01 (UK)	
Input Voltage	230 VAC ±10%, 50 Hz
Output Voltage	24 VAC, 50 Hz @ 500 mA, ±5%
Dimension	3.2"H x 2.2"W x 1.9"D (8.13 x 5.59 x 4.83 cm)
Weight	0.9 lb (0.41 kg)
Certification	CE RoHS2

Simple Integration

The AeroBar Model 5225S is powered by a 24 VAC source, eliminating the need for an external controller. Wall transformer kits (24 VAC output) are available for easy installation using flat modular cables. An FMS output signal from the bar provides an immediate warning in the event of an alarm.

Several lengths of the AeroBar are available, including three specially designed for two, three and four EFEM load port applications. Multiple AeroBars can be installed in either a daisy-chain or drop-tee configuration, creating a system that is versatile and easy to install in any customized equipment or application.

Handheld Remote

As part of our line of digital ionizers, the Model 5225S provides excellent reliability and performance. The Model 5225S, with its infrared Handheld Remote, provides exacting parameters and an easy setup. It's ideal for retrofits, low volume tools, systems with programmable logic controllers (PLC) or cleanroom work areas, where the digital ionization's performance, stability and reliability are desired.

Ordering Information

91-5225SU-xxR	AeroBar with *silicon* emitter points in (xx =) -22, -28, -44, -64, -84" nominal bar lengths and the following EFEM configuration lengths 36" (2 loadport), 56" (3 loadport), 76" (4 loadport)
91-5225SU-xx-SUPR	AeroBar with *silicon* emitter points in (xx =) -22, -28, -36, -44, -56, -64, -76, -84" bar lengths; single unit packaging
91-5225SC-xxR	AeroBar with *titanium* emitter points in (xx =) -22, -28, -44, -64, -84" nominal bar lengths and the following EFEM configuration lengths 36" (2 loadport), 56" (3 loadport), 76" (4 loadport)
91-5225SC-xx-SUPR	AeroBar with *titanium* emitter points in (xx =) -22, -28, -36, -44, -56, -64, -76, -84" bar lengths; single unit packaging
91-5570	IR Handheld Remote
33-1422-01	Wall Transformer Kit, 120V/24 VAC 500 mA, 16' (4.8m) cable with j-box, US
33-1432-01	Wall Transformer Kit, 230V/24 VAC 500 mA, 16' (4.8m) cable with j-box, EU
33-1435-01	Wall Transformer Kit, 230V/24 VAC 500 mA, 16' (4.8m) cable with j-box, UK
33-1447-01	Wall Transformer Kit, 230V/24 VAC 500 mA, 16' (4.8m) cable with j-box, AU/CN

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worldwide leaders in **static control**