



Ionization Systems

AeroBar® Ionizer

MODEL 5285

ION Systems AeroBar Ionizer Model 5285 is designed to control static charge in minienvironments, laminar flow hoods and workstations. The Model 5285 features a unique aerodynamic design that ionizes a local area without disrupting laminar flow. Its pulsed DC technology, combined with optimized emitter point spacing, provides uniform performance over the work area.

As with ceiling emitters, output and balance can be adjusted at each bar. The Model 5285 comes in a variety of lengths. Installation uses a variety of easy-mount clips making it fast and easy. An enhanced model, the Model 5285e, features ion current regulation and an operational failure alarm.

Features & Benefits

- Sequenced bipolar ionization
- Unique aerodynamic design
- Individual positive and negative power controls at each bar
- Ion current regulation and operational failure alarm (Model 5285e only)
- Settable onTimes and offTimes provide the most efficient ionization performance, minimizing recombination
- Ionizes local areas without disrupting laminar flow
- Bars can be individually fine-tuned for different airflows and environmental conditions
- Ion current regulation maintains ion output and balance and a red LED at each AeroBar ensures quick notification of alarm conditions



Specifications

Input Voltage	24 VAC max, 50/60 Hz, 1W
Output Current	<15 microamps; current and voltage limited to eliminate shock hazard
Connectors	Telco RJ-11 modular jack receptacle on each end of the AeroBar
Regulation	Output and balance stability is achieved by independently regulating the ion emission of each polarity (Model 5285e)
Output Control	Each AeroBar has controls that independently adjust both positive and negative output
Timing	Precise timing (0-9.9 sec.) is supplied by the controller. Two red LEDs on each AeroBar indicate the polarity of the ion emission
lon Emission	Pulsed DC
Emitter Points	Single-crystal silicon, machined titanium, or tungsten alloy; all replaceable, with an estimated life of 2-3 years, depending on material and environment
Maintenance	Annual calibration recommended; emitter point inspection and cleaning as environment conditions require
Alarm	Alarm operates when the AeroBar is no longer able to maintain the preset ion output regulation. Red LED on the AeroBar and on the Controller (if featured) indicate an alarm condition; optional audible alarm sounds at the 5024 Controller when an alarm event occurs at any AeroBar
Ozone	<0.005 ppm (24-hour accumulation)
EMI	Below background level
Mounting	A variety of mounting methods and clips are available
Dimensions	2.1H x 1.2W x 22, 28, 44, 64, or 84L in. (5.3H x 3.0W x 55.8, 71.1, 111.8, 162.6, or 213.4 cm)
Weight	6 oz per ft of bar length (0.17 kg per 30 cm)
Warranty	Two year limited warranty
Certifications	SEMI F47 RoHS Compliant

Ordering Information

91-5285T-xxR	AeroBar with tungsten wire emitter points in -22, -28, -44, -64, or -84 inch bar lengths
91-5285C-xxR	AeroBar with titanium emitter points -22, -28, -44, -64, or -84 inch bar lengths
91-5285U-xxR	AeroBar with silicon emitter points -22, -28, -44, -64, or -84 inch bar lengths
91-5285E-xxR	AeroBar with alarm, tungsten wire emitter points -22, -28, -44, -64, or -84 inch bar lengths
91-5285EC-xxR	AeroBar with alarm, titanium emitter points -22, -28, -44, -64, or -84 inch bar lengths
91-5285EU-xxR	AeroBar with alarm, silicon emitter points
91-5024-CER	Controller, supports up to 4 AeroBars
91-5024E-CER	Controller with alarm, supports up to 20 AeroBars
91-5024E-CE-ALMR	Controller with audible alarm, supports up to 20 AeroBars

Power and Control

The Model 5285 AeroBar Ionizer is powered by the Model 5024 Controller. Depending on the version ordered, the Model 5024 supports up to four or up to 20 AeroBars, with visual and audible alarm options. Visual and audible alarms mirror the alarm LED on the AeroBar, and Controllers with the alarm options also support FMS (facility monitoring systems) with an optional module connection.



The Model 5024 Controller supports either up to four or up to twenty AeroBars, with or without visual or audible alarms.

Emitter Point Cleanliness

The AeroBar Ionizer operates with three emitter point materials: single-crystal silicon, machined titanium, and tungsten alloy. All points are replaceable. The choice of three materials provides versatility, allowing the AeroBar to be used in the cleanest of environments. Single-crystal silicon is still the only proven "ISO 14644-1 Class 3 standards (Fed. Std. 209e) Class 1 equivalent" emitter point material, providing the cleanest alternative in static charge control. Both titanium and tungsten alloy points are appropriate where users must avoid a specific material as a possible contaminant.



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