



## μWire AeroBar® MODEL 5711

Simco-Ion's μWire ("Microwire") AeroBar Model 5711 is a cost-effective, high-performance ionizer specifically designed to eliminate static charge on large surface areas. Similar to the μWire AeroBar 5710, the 5711 is particularly suited for sensitive flat panels where fast discharge times and low swing voltages are desired. The shorter bar length of the 5711 is ideal for space constrained tools in both the flat panel and back-end semiconductor processes. The μWire AeroBar utilizes MicroPulse Technology applied to a corona wire system for optimal performance. MicroPulse Technology reduces ion recombination at the corona wire, thus increasing product efficiency and performance.

The μWire Bar is optimized for lower gas consumption through its unique corona wire design. Corona wire produces more ions than emitter points; thus, less gas is needed to effectively ionize the target area. The corona wire design also permits the bar to be placed closer to substrates, diminishing the recombination of ions and the resulting "stripping effect".

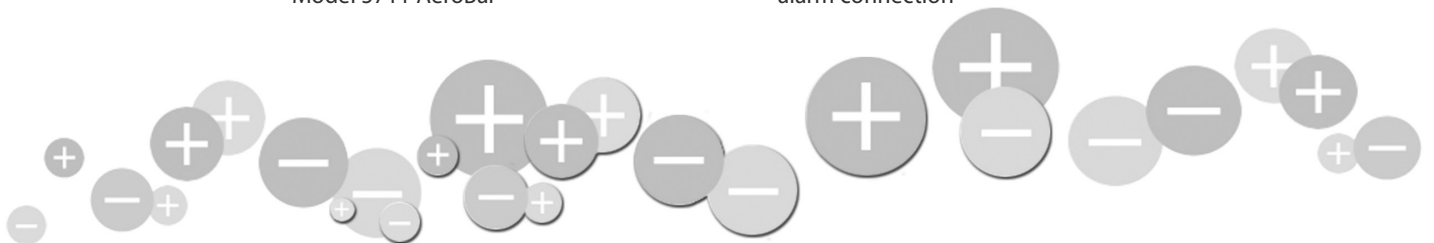
The 5711 includes all the latest design features of the μWire AeroBar to make the bar easier to clean and provide higher performance. Shields have been added to protect the corona wire contacts during the cleaning process, making it truly a "one-swipe to clean" bar.

### Features

- Compact size 6 or 10 inches (150 or 250 mm length)
- Unique corona wire design (no emitter points)
- MicroPulse Technology
- Remotely mounted controller for Model 5711 AeroBar

### Benefits

- Charge protection for even the most space-limited automation tools
- Bar mounted close to the target without ionization "stripping"; one-swipe cleaning with the bar in place
- Long-term balance stability and discharge time performance
- Uniform balance over the length of the bar
- Innovative ionization generation that translates to lower total cost of ownership
- Convenient access to power input, status lights and remote alarm connection



Model 5711	
<b>Voltage</b>	Input: 24 VDC ±10%, 12W (max) Output: Adjustable, 13 kV pk-pk (typ)
<b>Discharge</b> <sup>1</sup>	3.5 sec decay average @ 600 mm (typ) measured at 5711 AeroBar center and 25 mm straight air jet spacing, 18 l/m purging air, (250 mm long AeroBar), no laminar flow; setting 1 Hz, 100% output, CPM: balance <±10V; swing 100V pk-pk
<b>Balance</b>	<±25V over the length of the bar; maintains balance performance >6 months without cleaning (in an ISO 14644-1 Class 4 or better environment)
<b>Range</b>	Target ionization 150-2000 mm, application and performance specification dependent
<b>Frequency</b>	Factory default setting is 1 Hz, adjustable from 0.1-35 Hz
<b>Ion Emission</b>	MicroPulse (µPulse) Technology
<b>Emitter</b>	Tungsten Wire, 80 micron dia.
<b>Cleanroom Class</b>	ISO 14644-1 Class 2
<b>LED Indicator</b>	Green POWER; yellow COMMUNICATION; red ALARM (combinations of LEDs indicate specific status conditions of the bar)
<b>Bar Setting</b>	All operating parameters set via a Handheld Terminal (HHT) by either wired connection or by battery powered IR control to the 5711-CTRL Controller
<b>Air Supply</b>	Input: Clean Dry Air (CDA) Flow: 150 mm AeroBar = 10 lpm, overall per bar; 250 mm AeroBar = 18 lpm, overall per bar (recommended flow is 2 lpm per jet orifice)
<b>Alarm Output</b>	Relay contact, rated ±24 VDC @ 0.2A max
<b>Ozone</b>	<0.05 ppm
<b>EMI</b>	Below background level
<b>Operating Env</b>	15-35°C (59-95°F); 30-60% RH, non-condensing
<b>Enclosure</b>	Ionizer: ABS chassis; stainless steel reference plates Controller: Stainless steel chassis
<b>Dimension</b>	Ionizer: 3.0"H x 1.3"W x 6.3 or 10.2"L (7.62 x 3.30 x 16.0 or 25.9 cm) Controller: 4.7"H x 1.9"W x 3.2"D (11.9 x 4.82 x 8.2 cm)
<b>Warranty</b>	Two year warranty
<b>Certification</b>	

1. Tested in accordance with ANSI/ESD STM3.1-2015.

## Ordering Information

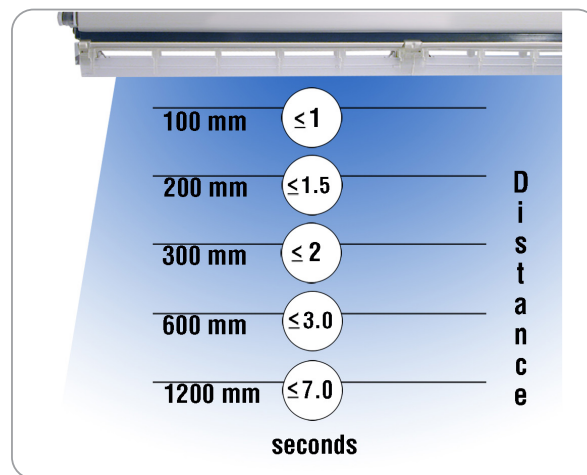
<b>91-5711-150-25-01</b>	µWire AeroBar Model 5711 with 25 mm straight air jet spacing, 150 mm length
<b>91-5711-250-25-01</b>	µWire AeroBar Model 5711 with 25 mm straight air jet spacing, 250 mm length
<b>92-5711-150-01</b>	µWire AeroBar Model 5711 kit includes Model 5711 bar (150 mm), 5711-CTRL controller, 25-0541-3M cable and AC to DC power adapter 14-21328 (IEC power cord required, contact Sales Services for detail)
<b>92-5711-250-01</b>	µWire AeroBar Model 5711 kit includes Model 5711 bar (250 mm), 5711-CTRL controller, 25-0541-3M cable and AC to DC power adapter 14-21328 (IEC power cord required, contact Sales Services for detail)
<b>91-5711-CTRL-01</b>	µWire AeroBar Model 5711 controller (supports one Model 5711 bar)
<b>25-0541-3M</b>	CAT-5e bar to controller RJ-45 shielded interconnect cable, (3m)
<b>14-21328</b>	100-240 VAC to 24 VDC power adapter for 5711-CTRL controller (IEC power cord required, contact Sales Services for detail)

See µWire AeroBar Accessory datasheet for information on µWire AeroBar Model 5711 mounting clips, handheld terminal, Power-Signal Distribution Box and other accessory products.

## Application Flexibility

The µWire AeroBar can be operated with the factory default settings in “plug-and-play” mode, or optimized for a specific application using the Handheld Terminal. The bar’s ability to perform well in either a vertical or horizontal position along with the µWire AeroBar low profile height and length design makes it easy to install in a variety of flat-panel tool locations (mail-slot, conveyor and load/unload cassette areas as well as within many back-end semiconductor assembly and test areas.

## Discharge Time Performance (Typical)



µWire AeroBar Model 5711 (250 mm length) with 25 mm Air Jet Spacing. Measured using Simco-Ion CPM Model 280A with CDA flow at 2 l/m per air jet (18 l/m total) and no HEPA flow.

## 5711-CTRL Controller

The µWire AeroBar 5711 features a controller that can be placed in a convenient location for easy access to power input (local 24 VDC or power adapter from AC wall power), ionization status lights, handheld terminal setup connection and remote status connection.

**SIMCO ION**<sup>TM</sup>  
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