



# μWire AeroBar<sup>®</sup>

## MODEL 5710

Simco-Ion's μWire ("Microwire") AeroBar Model 5710 is a cost-effective, high-performance ionizer specifically designed to eliminate static charge on sensitive flat panels where fast discharge times and low swing voltages are desired. The μWire Bar 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. Using this breakthrough technology, the μWire Bar maintains peak performance for longer periods between cleanings, resulting in extended cleaning cycles compared with conventional products.

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 combined with optimal positioning of the gas orifices along the emitter cartridge offers a lower cleaning frequency over time.

### Features

- Unique corona wire design (no emitter points)
- MicroPulse high voltage technology
- Flexible and powerful setup

### Benefits

- Significantly longer cleaning intervals than with standard emitter point technology products
- Fast cleaning with a single swipe of the wire, accomplished with the bar in place
- Reduced gas consumption with equivalent performance
- Allows mounting close to product without danger of striping
- Long-term balance stability and discharge time performance, surpassing emitter point technology product capabilities
- Uniform balance over the length of the bar
- Lower cost-of-ownership than emitter-point technology ionizers
- Standard "plug-and-play" use or user-optimized performance for specialized applications



## Specifications

<b>Input Voltage</b>	24 VDC $\pm$ 10%, 12W (max)
<b>Output Voltage</b>	Adjustable, 13 kV pk-pk (typ)
<b>Range</b>	50-2000 mm, application and specification dependent
<b>Frequency</b>	Default setting at 5 Hz, adjustable from 0.1-35 Hz
<b>Balance</b>	Inherently self-balancing system $<$ $\pm$ 25V over the length of the bar; maintain balance setting $>$ 6 months without cleaning
<b>Ion Emission</b>	Micropulsed high voltage technology
<b>Corona Wire</b>	Tungsten, 100 micron dia.
<b>Gas Supply</b>	Clean dry air (CDA)
<b>Inlet Pressure</b>	50 psi (optimal); 90 psi (max)
<b>Cleanroom Class</b>	ISO 14644-1 Class 4 (Fed Std. 209E Class 10)
<b>Operating Env.</b>	Temperature 15-35°C (59-95°F); humidity 30-60% RH, non-condensing
<b>Ozone</b>	$<$ 0.05 ppm
<b>EMI</b>	Below background level
<b>Bar Settings</b>	All operating parameters set via a wired handheld terminal (HHT)
<b>LED Indicators</b>	Green POWER; Yellow COMMUNICATION; Red ALARM (combinations of LEDs indicate specific status conditions of the bar)
<b>Enclosure</b>	ABS chassis; stainless steel reference plates
<b>Dimensions</b>	3.3H x 1.3W x 15.75/19.7/25.6/29.5/35.4/39.4/45.3/49.2/55.1/59.1/65/68.9/74.8/78.7/84.65/88.6/94.5/98.4/104.3/108.25/114.15/118.1L in. (84H x 33W x 400/500/650/750/900/1000/1150/1250/1400/1500/1650/1750/1900/2000/2150/2250/2400/2500/2650/2750/2900/3000L mm)
<b>Warranty</b>	Two year warranty
<b>Certifications</b>	  (pending) RoHS Compliant

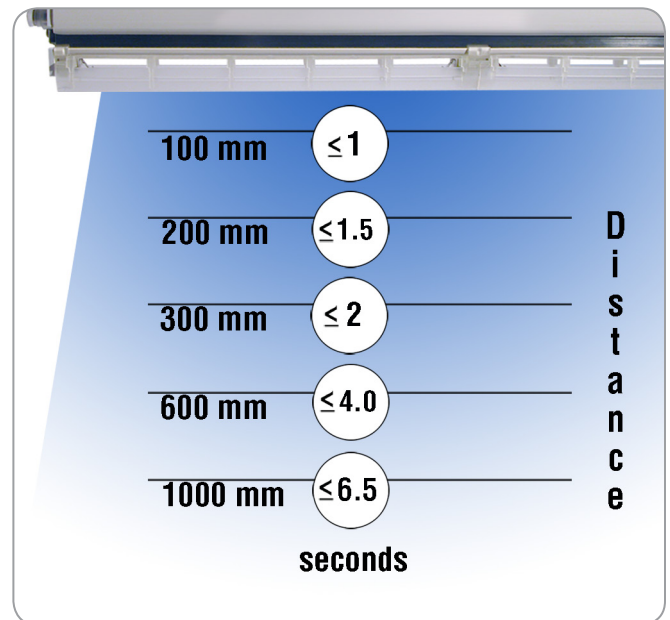
## Ordering Information

<b>91-5710-xxxx-01</b>	Model 5710 in 400/500/650/750/900/1000/1150/1250/1400/1500/1650/1750/1900/2000/2150/2250/2400/2500/2650/2750/2900/3000 mm lengths
<b>91-5700-HHT-01</b>	Handheld Terminal (HHT) with 4-line LCD display and two 15 ft (4.5m) cables
<b>33-5700-01</b>	Power-Signal Distribution Box
<b>33-5701-01</b>	24 VDC Power Supply for 5710 (requires 1 power cord, see below)
<b>33-1710-xx</b>	Interconnect cable, xx = 10, 15, 20, 40 ft lengths
<b>32-2213-SC</b>	5710 Flush Mounting Bracket, SST (require 2 per bar $<$ 1250 mm, 3 per bar between 1250-2150 mm, and 4 per bar $>$ 2150 mm lengths)
<b>32-2211-01</b>	5710 Rotatable Mounting Bracket, SST (require 2 per bar $<$ 1250 mm, 3 per bar between 1250-2150 mm, and 4 per bar $>$ 2150 mm lengths)
<b>25-20xxx</b>	IEC Power Cord, xxx = 660 (US plug), 710 (UK plug), 735 (German Schuko plug), 750 (China plug)
<b>25-05xx</b>	CAT-5 Cable, xx = 04, 10, 15 ft lengths

## Application Flexibility

The  $\mu$ Wire 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 makes it easy to install in a variety of flat-panel tool locations, including mail-slot, conveyor and load/unload cassette areas. Multiple bars in a single tool can be “slaved” to a master bar.

## Discharge Time Performance



Measured using Simco-Ion CPM Model 280A w/HEPA flow (60 fpm or 0.3m/sec) & CDA flow at 50 lpm.

## Handheld Terminal (HHT)

The Handheld Terminal allows you to set all operating parameters through either a wired connection or IR line-of-sight. The 4-line LCD readout can display real-time monitored values for system diagnostics, including bar address, frequency, high voltage output level, standby mode, alarm test and firmware revision. A single HHT can be used to adjust each bar individually, or to adjust all bars via the master when operating in master-slave mode.



## Power-Signal Distribution Box

When 5710 AeroBars must be mounted in a difficult-to-reach or difficult-to-see location, use the Power-Signal Distribution Box to provide a convenient location to display ionization status alarm signals and plug in a HHT to modify or monitor AeroBar performance.



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