



# Localized Ionizer with Air Assist

# fusION AA

Simco-lon's fusION AA Ionizer is capable of controlling electrostatic charge in the local area. The fusION AA delivers powerful electrostatic charge control independent of ambient airflow conditions. Using CDA (clean dry air) at low flow rates the fusION AA will enjoy extended maintenance intervals. fusION AA incorporates miniature power and control circuitry in a compact package. No adjustments or calibration are necessary with Simco-lon's patented auto balancing technology.

Simple to install, operate and maintain; mount the fusION AA in a convenient location adjacent to the static problem, connect the power supply and compressed gas tubing and fusION AA begins to eliminate static charge. This incredibly compact unit can be installed in places where typical ionizer designs do not fit. Multiple units can be linked together from one optional 24 VDC power source allowing 5 units to be daisy-chained. The air inlet can be positioned in any one of three positions located on consecutive 90-degree angles. The fusION AA is available with tungsten emitters ideal for system integration with the capability to remotely monitor status.

# **Features**

- · Air assist connection
- Compact design
- Auto balancing technology
- Visual ionizer status indicator and digital level remote alarm output
- · Single power source for multiple fusION ionizers

## **Benefits**

- Provides independent airflow, increasing performance and extending cleaning periods
- · Fits into tight confined spaces of any process tool
- No adjustments needed to maintain the required balance
- Standard features for convenient user operation
- Daisy-chain up to 5 fusION ionizers, ideal for providing ionization protection at multiple locations within a tool



Specification	
Input Voltage	24 VDC, 0.075A
Discharge <sup>1</sup>	<5 sec @ 6" (15 cm) at 10 psi gas pressure
Balance	<±50V
Coverage Area	12" x 12" (30 x 30 cm) @ 6" (15 cm) spacing
Working Distance	Minimum 3" (76 mm) from target surface, application dependent
Air Supply	Clean Dry Air (CDA) or Nitrogen
Airflow	5 scfm @ 5 psi to 4 scfm @ 50 psi
Air Connection	3.3 mm (0.13") ID tubing
Output Current	5 μΑ
Ion Emissions	Steady-state DC
Emitters	Tungsten emitter points
Cleanliness	ISO 14644 Class 4
Connectors	DC power IN/OUT: 4 position modular, 4-pin "handset type"
Indicators	Green POWER ON; red FAULT (TTL level alarm output) LEDs
Operating Env.	Temperature 59-122°F (15-50°C); humidity 30-65% RH, non-condensing
Mounting	Integrated mounting flanges accept four (4), #4 or #6 screws
Enclosure	White Polycarbonate
Dimensions	1.3"H x 1.3"W x 4.5"L (3.3 x 3.3 x 11.4 cm)
Weight	0.25 lb (113 g)
Warranty	Two year limited warranty
Certifications	230V, 50 Hz CULus 120V, 60 Hz
Power Supply	
Output Voltage	24 VDC
Input Voltage	100-240 VAC, 50/60 Hz
Dimensions	1.3"H x 2.0"W x 3.5"L (3.3 x 5.1 x 8.9 cm)
Weight	11 oz (318g)

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

# **Ordering Information**

4010831	fusION AA Air Ionizer, Tungsten (W) emitters
5051288	fusION Tungsten (W) Emitter Kit, 4 emitters
4010448	fusION Power Supply Kit, 120V, 60 Hz, NA/Japan
4010449	fusION Power Supply Kit, 230V, 50 Hz, EU
4010450	fusION Power Supply Kit, 230V, 50 Hz, UK
5051309	fusION AA High Purity Gas Supply Kit x 120

# **Applications**

Typical applications for fusION AA are found inside process equipment and mini-environments in the semiconductor, flat panel display, pharmaceutical, and medical device industries. It is especially well suited for applications with space constraints or close proximity to products.

### **Air Assist Benefits**

Controlled airflow can improve performance of any ionizer. In applications that may benefit from improved airflow use of CDA will result in improved discharge time performance, offset voltage performance and typically extends the interval between emitter cleanings.

## **Optional High Purity Gas Kit**

High Purity Gas Kit for fusION AA includes 10 feet (3 meters) of plasticizer-free, smooth bore flexible clear Tygon tubing 3.3" (0.13 mm) ID and 6.6" (0.25 mm) OD.



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