



Localized Ionizer with Air Assist

fusION™ AA

Simco-Ion'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-Ion's patented auto balancing technology.

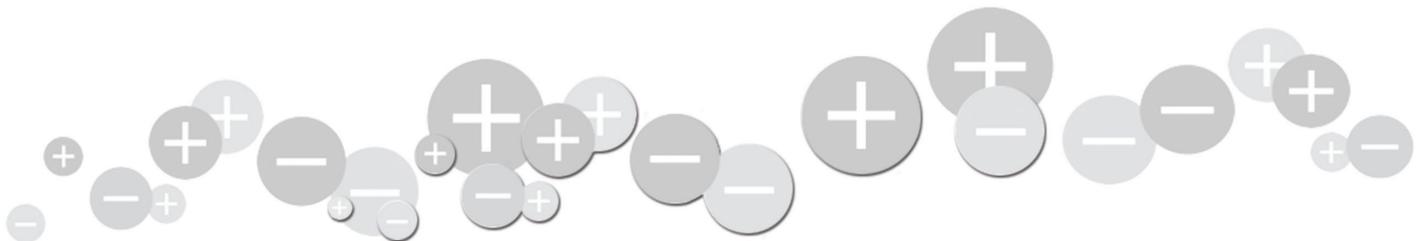
Simple to install, operate and maintain; mount the fusION AA in a convenient location adjacent to the static problem, connect the power supply and compressed gas tubing and fusION AA begins to eliminate static charge. The air inlet can be positioned in any one of three positions located on consecutive 90-degree angles. 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 fusION AA available with tungsten emitters is 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



fusION AA	
Input Voltage	24 VDC, 0.075A
Output Current	5 µA
Discharge	<5 sec @ 6" (15.2 cm) @ 10 psi gas pressure
Balance	<±50V
Coverage	12" x 12" (30.5 x 30.5 cm) @ 6" (15.2 cm) spacing
Range	Minimum 3" (7.62 cm) from target surface application dependent
Ion Emission	Steady-state DC Technology
Emitter	Tungsten
Cleanroom Class	ISO 14644-1 Class 4
Air Supply	Input: Clean Dry Air (CDA) or Nitrogen Flow: 5 scfm @ 5 psi to 4 scfm @ 50 psi Connection: 0.13" (0.33 cm) ID tubing
LED Indicator	Green POWER ON; Red FAULT (TTL level alarm output)
Connector	DC power IN/OUT: 4 position modular, 4-pin "handset type"
Operating Env	32-122°F (0-50°C), 20-65% non-condensing
Mounting	Integrated mounting flanges accept four (4), #4 or #6 screws
Enclosure	White Polycarbonate
Dimension	1.20"H x 1.28"W x 4.50"L (3.01 x 32.5 x 11.4 cm) with flange
Weight	0.25 lb (0.113 kg)
Certification	  
Power Supply	
Output Voltage	24 VDC
Input Voltage	100-240 VAC, 50/60 Hz
Dimension	1.3"H x 2.0"W x 3.5"L (3.30 x 5.08 x 8.89 cm)
Weight	0.69 lb (0.31 kg)

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

Ordering Information

4010831	fusION AA Air Ionizer, Tungsten (W) 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"
5051288	fusION Replacement Tungsten (W) Emitter Kit, 4 emitters

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 120" (3 meters) of plasticizer-free, smooth bore flexible clear Tygon tubing 3.3" (0.13 mm) ID and 6.6" (0.25 mm) OD.

SIMCO ION™

An ITW Company

DS-FusionAA_V5 - 11/23
© 2023 Simco-Ion
All rights reserved.

Simco-Ion, Technology Group

1141 Harbor Bay Parkway, Suite 201
Alameda, CA 94502

Tel: +1 (800) 367-2452 (in USA)
Tel: +1 (510) 217-0460

ioninfo@simco-ion.com
www.simco-ion.com/technology

w o r l d w i d e l e a d e r s i n s t a t i c c o n t r o l