



# Compact Ionizing Bar

## fusION<sup>TM</sup>

Simco-Ion's fusION Ionizer is an air ionizer capable of controlling electrostatic charge in the local area. Applications for fusION are those 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 tight space constraints and low clearance.

The fusION delivers powerful electrostatic charge control capability by incorporating miniature power and control circuitry into a compact package. It can be installed in places where typical ionizer designs do not fit.

FusION is easy to install, operate and maintain. Simply mount fusION in a convenient location adjacent to the static problem. Connect the power supply and static charge is eliminated. No adjustments are necessary with Simco-Ion's auto balancing technology. This incredibly compact ionizer offers either tungsten or ISO Class 1 cleanroom grade silicon carbide emitters. FusION is also ideal for system integration with remote alarm capability. Multiple units can be linked together from one 24 VDC power source allowing up to 5 units to be daisy-chained. FusION can be powered directly from a process tool's 24 VDC power source or by the Simco-Ion fusION power supply kit.

### Features

- Compact design
- Auto balancing technology
- Visual ionizer status indicator and digital level remote alarm output
- Single power source for multiple fusION ionizers
- Optional Fan assembly



### Benefits

- Fits into the tight confines of any process tool
- No adjustments needed to maintain the required balance
- Standard features for convenient user operation
- Daisy-chain, up to 5 fusIONs, perfect for layered in-tool ionization protection
- Improved performance with extended coverage area





## Specifications

fusION	
Input Voltage	24 VDC, 0.075A
Discharge	w/o fan: <15 sec @ 6" (15.2 cm) with airflow (50 fpm/m) <sup>1</sup> ; w/fan: <10 sec @ 12" (30.4 mm) <sup>1</sup>
Balance	<±50V
Coverage	12" x 12" @ 6" spacing
Output Current	5 μA
Operation Mode	Steady-state DC
Emitters Points	Tungsten or Silicon Carbide
Connectors	DC power IN/OUT: 4 position modular, 4-pin "handset type"
LED Indicators	Green POWER ON; red FAULT (TTL level alarm output)
Operating Env.	Temperature 15-50°C (59-122°F) recommended; relative humidity 20-65%
Mounting	Integrated mounting flanges accept four (4), #4 or #6 screws
Enclosure	White Polycarbonate
Dimensions	1.3H x 1.3W x 4.5L in. (3.3 x 3.3 x 11.4 cm)
Weight	w/o fan: 0.25 lb (113 g); w/fan: 0.30 lb (136 g)
Warranty	Two year limited warranty
Certifications	RoHS Compliant  230V, 50 Hz  120V, 60 Hz
Power Supply	
Output Voltage	24 VDC
Input Voltage	100-240 VAC, 50/60 Hz
Dimensions	1.3H x 2.0W x 3.5L in. (3.3 x 5.1 x 8.9 cm)
Weight	11 oz (318g)
Optional Fan	
AirFlow	5 cfm
Input Voltage	24 VDC, 60 mA
Dimensions	1.6L x 1.6W x 0.4H in. (40 x 40 x 10 mm)
Audible Noise	31 dB

1. Tested in accordance with ANSI/ESD STM3.1-2006.

## Ordering Information

4010446	fusION Compact Air Ionizing Bar, Silicon Carbide (SiC) emitters
4010577	fusION Compact Air Ionizing Bar, 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
4010447	fusION Snap-on Fan Assembly

## Optional fusION Fan

The performance of any ionizer, including fusION, can be improved with the addition of controlled airflow. In applications that may benefit from improved airflow, an optional fan assembly is simply clipped to the fusION housing and power to the fan is supplied through a built in connection.



fusION with Fan Attachment



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