



Localized Ionizer

fusIONTM

Simco-Ion's fusION Ionizer is 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 tungsten 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, 0.2A |
| Discharge | w/o fan: <15 sec @ 6" (15.2 cm) with airflow (50 fpm/m) ¹ ; w/fan: <10 sec @ 12" (30.4 cm) ¹ |
| Balance | <±50V |
| Coverage | 12" x 12" @ 6" spacing |
| Output Current | 5 µA |
| Ion Emissions | Steady-state DC |
| Emitters Points | Tungsten |
| Cleanliness | ISO 14644-1 Class 4 |
| 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 |
| 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 |
| 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) |

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

Ordering Information

| | |
|---------|--|
| 4010577 | fusION 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 |
| 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



DS-Fusion_V4 - 10/14
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