

# 3M

## 963/963E

# Benchtop Air Ionizers



The use of ionized air in electronics work environments eliminates the build up of potentially damaging static charges. Air ionizers are primarily used to control static charge on nonconductive materials. Grounding is normally used to control charge on conductive objects and personnel, however, nonconductors cannot be grounded to drain electrostatic charge. Ionization is the only method of neutralizing a static charge on a nonconductor. Ionized air can neutralize static charges on circuit board substrates, insulating tapes and plastic objects found in the work area. The 3M™ 963 and 963E benchtop air ionizers, blanket the benchtop with ionized air to help prevent static from damaging sensitive electronics.

Two versions of Benchtop Air Ionizer available. The 963 benchtop air ionizer uses AC 120V power, while the 963E uses AC 220V/230V power. Both ionizers feature a two-speed fan, a power indicator lamp, a static-dissipative plastic housing, and a combination metal-plastic stand that can also double as a mounting bracket.

**Rapid neutralization of electrostatic charge**  
The ion-generation technology present in the 963 and 963E benchtop air ionizers is capable of producing extremely large amounts of ions, resulting in nearly instantaneous static charge neutralization. The 3M 963 is capable of reducing a static charge of 1000V to 100V in less than one second, at a one foot distance, when tested\* at the high fan speed. In addition, the powerful fan allows the generated ions to be carried at high speed for long distances. At a distance of three feet, the discharge time only increases to approximately five seconds.

**Intrinsically balanced, maintenance-free**  
3M ionizers have a proprietary, intrinsically balanced ion generation system which ensures that equal levels of positive and negative ions are produced despite variations in line voltage, fan speed, and emitter point condition. No adjustment or calibration is required to maintain ion balance. This allows the unit to generate a balanced mix of positive and negative ions - even if the emitter points become dirty.

**Both the 963 and 963E are virtually maintenance free.**  
The ionizer's unique design requires only periodic cleaning of emitter points to maintain optimum performance. The points do not require replacement and the unit does not require adjustment before or after cleaning.

**Quiet and comfortable air flow**  
The two-speed fan in the 963 and 963E benchtop air ionizers is extremely quiet at low speed. Where industrial noise may irritate personnel and lower productivity, the 963 and 963E may be used without contributing significantly to the ambient noise. The fan's gentle airflow does not disturb paper or delicate parts. The high-speed fan setting can be used for more rapid neutralization of static charges in environments where faster decay rates are required.

**Static-dissipative housing safe to use in ESD sensitive areas**  
The injection-molded plastic case is constructed of static-dissipative plastic. The conductivity of the case prevents a static charge from building up on the surface of the housing, a common problem with ionizers. This "ESD-safe" design allows the ionizer to be part of your overall static-safeguarded electronic workstation.

\*When tested according to ANSI/ESD S3.1-1991

Meets Global Regulatory Requirements  
Global usage of electronic products are often dependent on the product meeting regulatory requirements for the country of usage. To achieve this end, the 3M™ Models 963 and 963E have been tested to, and have passed, regulatory testing for U.S., Canada, Mexico and the European Union. The 963 carries the UL, C-UL, and NOM marks, while the 963E carries the CE mark.

#### Basic Features

- Two versions available, depending on operating voltage
- Neutralizes static charges on nonconductive objects
- Maintains equal balance of positive-negative ions
- Two-speed fan
- Static-dissipative housing
- UL, C-UL, CE, NOM certification.

### 963 Benchtop Air Ionizer Properties

Model	963	963E
Operating Voltage and Frequency	AC 120V 60 Hz 0.2A 20W	AC 220V/230V 50/60 Hz 0.12A 20W
Power Outlet	IEC 320 Socket	IEC 320 Socket
Supplied Power Cord	6' (1.8m) cord with IEC 320 and NEMA 5-15 plugs	6' (1.8m) cord with IEC 320 and Continental Europe (EURO) plugs
Dimensions	6.0" W x 7.4" H x 3.0" D 15.2cm W x 18.8cm H x 7.6cm D	6.0" W x 7.4" H x 3.0" D 15.2cm W x 18.8cm H x 7.6cm D
Weight	2.5 lb. (1.1 kg)	2.5 lb. (1.1 kg)
Air Velocity	low speed – 200 fpm (1.0 m/s) high speed – 370 fpm (1.8 m/s)	low speed – 100 fpm (0.5 m/s) high speed – 300 fpm (1.5 m/s)
Static Discharge Time*	1' (30cm) < 1 second at high fan speed 3' (91cm) < 5 seconds at high fan speed	1' (30cm) < 1 second at high fan speed 3' (91cm) < 5 seconds at high fan speed
Certifications and Approvals	UL, C-UL, NOM	CE
Warranty	1-year	1-year

(All values are typical, not specifications)

\*When tested according to ANSI/ESD S3.1-1991

**For ordering information, technical information or product information you can reach us at:**

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