

## GEN4™ Ionizing Bars



# GEN4™ Ionizing Bars

Low cost **GEN4™** Ionizing Bars eliminate static cling!

Compact, rugged design for industrial applications!



### What Is The **GEN4** Ionizing Bar?

EXAIR's Gen4 Ionizing Bar is engineered to perform up to 25% better than previous models for applications where the bar is mounted within 2" of the surface it is treating. It has also been designed to perform well 100% farther away by providing static elimination up to 4" from a charged surface. Gen4 Ionizing Bars eliminate static electricity on paper, film and plastics that can attract dust and foreign materials, ruin product appearance, produce tearing or jamming, and zap personnel. The electrically powered Gen4 Ionizing Bar is compact, allowing it to fit in the confined spaces of machinery, where the charge is generated. A high concentration of positive and negative ions produce fast static decay, neutralizing any surface within 4" (102mm) of the bar.

Static Eliminators

### Why The **GEN4** Ionizing Bar?

The unique design of the shockless Gen4 Ionizing Bar offers improved performance and reliability in industrial applications. Life expectancy has been extended by insertion molding the stainless steel ion emitters into a durable engineered polymer. There are no openings or grooves to accumulate dirt that could cause shorting or arcing. A 5kV power source provides high performance, eliminating frequent burnouts commonly associated with traditional 7kV bars.

The Gen4 Ionizing Bar includes a five foot shielded cable with ground. A mounting flange is provided for easy installation and all components are fully assembled. Standard lengths up to 108" (2743mm) are available from stock and special lengths up to 119" (3.02m) are available by special order. EXAIR Model 7960 or 7961 Gen4 Power Supply (5kV) is required for bar operation.

The ability to eliminate static can be greatly improved when attaching the Super Air Knife to the Gen4 Ionizing Bar. The Gen4 Super Ion Air Knife propels the static neutralizing ions over a larger area which is ideal for high speed, high charge applications. Air delivery can also remove dust and clean the product surface.

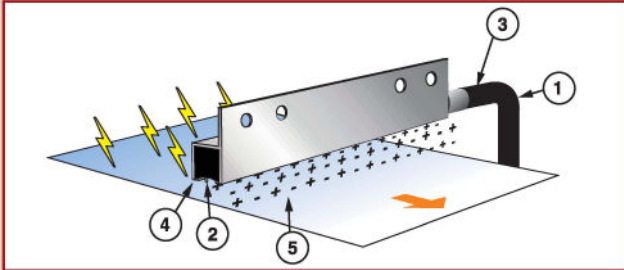
#### Applications

- Labeling
- Bag making - form and fill
- Neutralizing shrink wrap
- Sheet fed and web presses
- Packaging
- Converting machinery
- Neutralizing slitting operations
- Textiles
- Screen printing

#### Advantages

- Significantly improved performance when positioned 2" or closer to a surface
- Capable of minimizing static charge from up to 4" away
- Rugged metal armored and electromagnetically shielded cable
- Integrated ground eliminates additional ground connection
- Durable stainless steel connections to Power Supply
- Low cost
- Rapid static decay
- Compact
- Effective up to 4" (102mm)
- Shockless, non-radioactive
- Rugged design for industrial environments
- Easy to install, equipped with mounting flange
- Low maintenance
- Fully assembled

## How The GEN4 Ionizing Bar Works



The electromagnetically shielded power cable (1) carries the 5kVrms power supply output to each inductively coupled stainless steel emitter point (2) of the Gen4 Ionizing Bar. An integrated ground wire (3) within the power cable creates a discharge path from the emitter points to the bar channel (4). The discharge at each emitter charges the molecules of the gases of the surrounding room air, resulting in a shower of ions that are positively and negatively charged (5). If the material surface has a negative charge, it will attract the positive ions from the Gen4 Ionizing Bar and become balanced or neutralized. If the material surface has a positive charge, it will attract the negative ions from the Gen4 Ionizing Bar to become balanced or neutralized.

The voltage potential at each emitter is high enough to ionize the surrounding air without generating a shock when any of the emitters are touched.

## GEN4 Ionizing Bars

Gen4 Ionizing Bars - include a 5' (1.52m) length of armored and electromagnetically shielded cable and assembled connector. For other cable lengths, please contact the factory.

Length	Gen4 Ionizing Bar Models
3" (76mm)	8003
6" (152mm)	8006
9" (229mm)	8009
12" (305mm)	8012
18" (457mm)	8018
24" (610mm)	8024
30" (762mm)	8030
36" (914mm)	8036
42" (1067mm)	8042
48" (1219mm)	8048
54" (1372mm)	8054
60" (1524mm)	8060
72" (1829mm)	8072
84" (2134mm)	8084
96" (2438mm)	8096
108" (2743mm)	80108

## GEN4 Ionizing Bar Specifications

EXAIR Model 7960 or 7961 Gen4 Power Supply (5kV) is required for bar operation. See page 129 for details.

**Certifications:** Gen4 Ionizing Bars and Gen4 Power Supplies are UL Component Recognized to U.S. and Canadian safety standards, and are CE and RoHS compliant.



**Electrical:** For use with 5 kVrms, 5 milliamperes (max.) power supply.

**Electrical Hazard:** Gen4 Ionizing Bars are shockless (less than 40 microamperes short circuited).

**Do not use near flammable materials or gases.**

**Materials of Construction:**

**Metal Parts:** Aluminum

**Plastic Parts:** UL rated 94 HB

**Emitters:** Stainless Steel

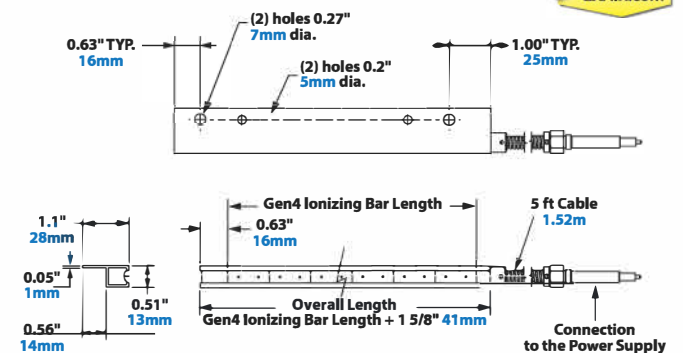
**Maximum Ambient Temperature:** 165°F (74°C)

## GEN4 Ionizing Bar Performance

Dissipates 5kV* (seconds)	Distance From Charged Surface				
	0.50" (13mm)	1" (25mm)	2" (51mm)	3" (76mm)	4" (102mm)
	0.1	0.14	0.29	0.53	0.96

\* Multiple different length Ionizing Bars tested (3"-48").

## GEN4 Ionizing Bar Dimensions



## Accessories and Components

Model #	Description
7960	2 Outlet Selectable Voltage Gen4 Power Supply (115V, 230V, 50/60Hz)
7961	4 Outlet Selectable Voltage Gen4 Power Supply (115V, 230V, 50/60Hz)
7905	Static Meter



Model 8006 6" (152mm) Gen4 Ionizing Bar and Model 7960 Gen4 Power Supply.

Special length Gen4 Ionizing Bars up to 119" (3.02m) are available. Please contact our factory.



# GET4™ Power Supplies

**Selectable Voltage:**  
**For use with all Gen4 Static Eliminators!**

### Why Use GET4 Power Supplies?

The two and four outlet Gen4 Power supplies have selectable voltage which allows you to choose input voltages of 115VAC or 230VAC. The modular cable with electromagnetic shielding protects sensitive electronics against electromagnetic interference while easing connections and routing. An integrated fuse on the primary protects against voltage spikes.

### GET4 Power Supplies

The Two and Four Outlet selectable voltage Gen4 Power Supplies require an input of 115VAC, 50/60 Hz or 230VAC, 50/60 Hz. A 6' (1.83m) modular power cord and lighted power switch are included. Power Supplies are UL Component Recognized to U.S. and Canadian safety standards, and are CE and RoHS compliant.



The Model 7960 Gen4 Power Supply has 115VAC or 230VAC selectable voltage, lighted power switch, integral fuse on the primary, electromagnetically shielded modular power cable and (2) 5kV outlets.



The Model 7961 Gen4 Power Supply has 115VAC or 230VAC selectable voltage, lighted power switch, integral fuse on the primary, electromagnetically shielded modular power cable and (4) 5kV outlets.

Static Eliminators



### GET4 Power Supplies: Selectable Voltage

Model #	Description
7960	2 Outlet Selectable Voltage Gen4 Power Supply (115V, 230V, 50/60Hz)
7961	4 Outlet Selectable Voltage Gen4 Power Supply (115V, 230V, 50/60Hz)

### Advantages

- Replaceable rocker switch
- Durable, stainless steel high voltage connections
- Selectable voltage 115VAC or 230VAC
- Electromagnetically shielded modular power cable
- Fuse protects against voltage spikes
- Modular power supply cable eases connections and routing.

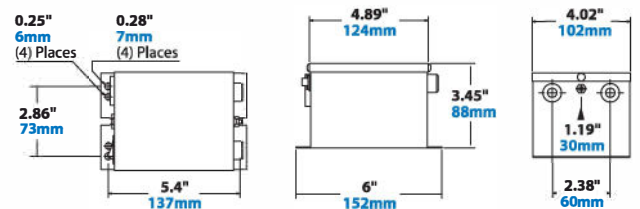
### GET4 Power Supply Dimensions



INPUT VOLTAGE: 115/230 VAC  
 INPUT CURRENT: .2/1 A MAX  
 FREQUENCY: 50/60 HZ

OUTPUT VOLTAGE: 5000 Vrms  
 OUTPUT CURRENT: 5 mA MAX

#### Model 7960



#### Model 7961

