



## Ionizing Bars

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

**Compact, rugged design for industrial applications!**



### What Is The Ionizing Bar?

EXAIR's Ionizing Bar eliminates 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 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 2" (51mm) of the bar.

### Why The Ionizing Bar?

The unique design of the shockless 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 plastic. 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 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 7901, 7907, 7940 or 7941 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 Ionizing Bar (see *Super Ion Air Knife*, page 81 of the Catalog). The 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.

Static Eliminators

### Applications

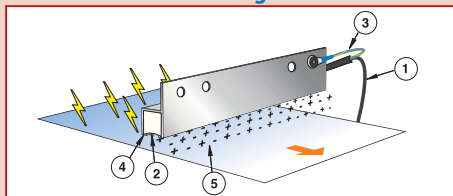
- Labeling
- Bag making - form and fill
- Neutralizing shrink wrap
- Sheet fed and web presses
- Packaging
- Converting machinery
- Neutralizing slitting operations
- Textiles
- Screen printing

### Advantages

- Low cost
- Rapid static decay
- Compact
- Effective up to 2" (51mm)
- Shockless, non-radioactive
- Rugged design for industrial environments
- Easy to install, equipped with mounting flange
- Low maintenance
- Fully assembled

# Ionizing Bars

## How The Ionizing Bar Works



The shielded power cable (1) carries the 5kVrms power supply output to each capacitively coupled stainless steel emitter point (2) of the Ionizing Bar. A ground wire (3) attached to the bar 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 ionizing bar and become balanced or neutralized. If the material surface has a positive charge, it will attract the negative ions from the 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.

## Ionizing Bars

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

Length	Ionizing Bar Models
3" (76mm)	7003
6" (152mm)	7006
9" (229mm)	7009
12" (305mm)	7012
18" (457mm)	7018
24" (610mm)	7024
30" (762mm)	7030
36" (914mm)	7036
42" (1067mm)	7042
48" (1219mm)	7048
54" (1372mm)	7054
60" (1524mm)	7060
72" (1829mm)	7072
84" (2134mm)	7084
96" (2438mm)	7096
108" (2743mm)	70108

## Ionizing Bar Specifications

**EXAIR Model 7901, 7907, 7940 or 7941 Power Supply (5kV) is required for bar operation.** See page 83 of the Catalog for details.

**Certifications:** Ionizing Bars are UL Component Recognized to U.S. and Canadian safety standards.

Power supplies are UL Listed 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:** Ionizing Bars are shockless (less than 40 microamperes short circuited).

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

**Materials of Construction:**

**Ionizing Bar Channel:** Aluminum

**Plastic Parts:** UL rated 94 HB

**Emitters:** Stainless Steel

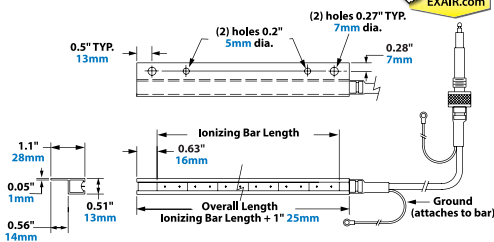
**Maximum Ambient Temperature:** 165°F (74°C)

## Ionizing Bar Performance

Dissipates 5kV* (seconds)	Distance From Charged Surface		
	0.50" (13mm)	1" (25mm)	2" (51mm)
	0.12	0.18	0.30

\* Model 7006 6" (152mm) Ionizing Bar tested

## Ionizing Bar Dimensions



DOWNLOAD drawings at EXAIR.com

## Accessories and Components

### Model # Description

<b>7901</b>	2 Outlet Power Supply (115V, 50/60Hz)
<b>7907</b>	2 Outlet Power Supply (230V, 50/60Hz)
<b>7940</b>	4 Outlet Power Supply (115V, 50/60Hz)
<b>7941</b>	4 Outlet Power Supply (230V, 50/60Hz)
<b>7902</b>	Extension Cable, 5' (1.52m) length
<b>7905</b>	Static Meter



Model 7006 6" (152mm) Ionizing Bar and Model 7901 Power Supply.

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