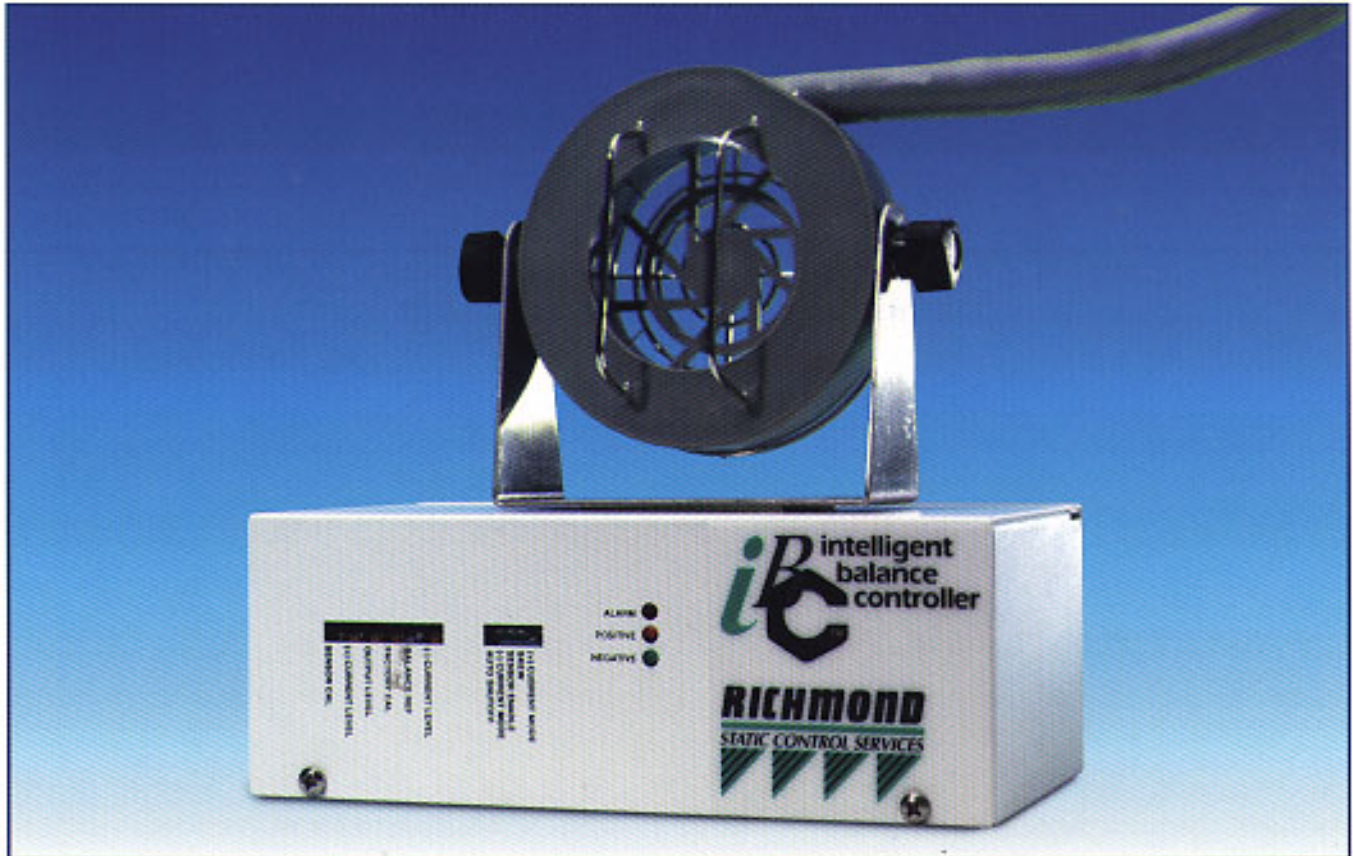


## Air Ring<sup>®</sup> 1000 Ionizer



*The Air Ring 1000 (AR1000) uses a unique air amplification technology to effectively move ionized air up to 6 feet with virtually no turbulence. Designed for applications in ultra-clean environments, the Air Ring 1000 projects ions farther than any other ionizer of its size. It is designed for environments with size and space constraints. The Air Ring 1000 measures only 4" x 5" including the mounting bracket.*

*Powered by the Intelligent Balance Controller™ (IBC-20), the AirRing 1000 is as clean as the compressed air or nitrogen used to drive it. When used with the IBC-20, its built-in sensor continuously monitors and maintains excellent ion balance. Typical offset voltages are less than  $\pm 10$  volts.*

### Features

- Unique air amplification
- Compact size
- Built-in balance sensor
- Ion balance as low as  $0 \pm 10V$

### Benefits

- Introduces virtually no air turbulence
- Ideal for tight spaces
- Clean, quiet operation

### Typical Applications

- Disk drive manufacturing
- MR head technology and charged coupled devices (CCD)
- ESD-sensitive assembly processes
- Medical manufacturing
- Pharmaceutical manufacturing

# Air Ring® 1000 Ionizer

## Specifications

### Input Operating Voltage

± 3.5 kV minimum  
± 12 kV maximum

### Output Current

10 µA nominal operating  
(3 µA to 40 µA range)

### Emitter Material

100% Tungsten

### Input Gas (< 500 ppm H<sub>2</sub>O)

Clean Dry Air (CDA) or dry nitrogen  
(25 to 50 psi range)

### Operating Temperature

75° F (24° C) nominal  
32° F to 158° F ambient  
(0° C to 70° C)

### Relative Humidity

40% nominal  
up to 85%, non-condensing

### Weight

14.5 oz (0.41 kgs)

### Dimensions

4.5" H x 2.0" W x 4.9" L  
(11.3 cm H x 5.1 cm W x 12.5 cm L)

### Cable Length

90" (2.28 m)

## IBC-20 Intelligent Balance Controller™

*The compact and lightweight IBC-20 delivers superior ionization balance and neutralization efficiency for critical ESD applications in areas with limited space. This regulated steady state DC power supply incorporates feedback circuitry which enables the unit to maintain ion balance as low as ±10 V.*

- Alarms indicate out-of-balance and low ionization conditions
- Controls easily accessible
- Convenient mounting bracket

## Specifications

### Input Voltage

115/220 VAC  
± 15% at 50/60 Hz

### Power Consumption

23 Watts nominal  
50 Watts maximum

### Output Voltage

± 3.5 kV minimum  
± 12 kV maximum (no load)

### Output Current

10 µA nominal operating  
(3 µA to 40 µA)

### Current Protection

Two 315 mA/250 V Fuses  
(Power Entry Module)  
One 400 mA/250 V Fuse  
(PC Board)



### Operating Temperature

32° F to 158° F ambient  
(0° C to 70° C)

### Relative Humidity

up to 85% non-condensing

### Weight

2 lbs., 1 oz. (0.94 kgs)

### Dimensions

7" L x 3.8" W x 2.6" H  
(17.8 cm L x 9.6 cm W x 6.6 cm H)



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