







Intellistat Ion Air Nozzle



Intellistat®Ion Air Nozzle™

A mountable nozzle for hands free static elimination at assembly stations and benchtop applications!

Rated Class 5 for clean rooms and controlled environments per ISO 14644-1



The patent pending Model 8505 Intellistat Ion Air Nozzle is EXAIR's latest hands-free innovation in a long line of static elimination solutions. This intelligent product provides a balanced ionized air stream to neutralize static and remove troublesome particulate during sensitive assembly work, test procedures and clean processes. With a +/-30 volt offset, the Intellistat nozzle was designed to use minimal compressed air while delivering a focused blowoff and exceptional static decay rates capable of reducing 1000 volts to 100 volts in 0.6 seconds. The design includes an efficient, low voltage transformer which converts 120VAC to 24V DC to assure safety. An EXAIR engineered air nozzle delivers the air well below the OSHA standards for noise exposure and dead-end pressure, which maintains safety compliance.



Including a compact stainless steel adjustable mounting bracket, the Intellistat nozzle can be mounted to benchtops and machine frames, for example, to provide hands-free operation when needing both hands to package, test or assemble parts and products. The Intellistat Ion Air Nozzle is designed with other convenient features including the 6mm push-in air connection, and green and red LEDs which indicate proper functionality. The housing is made of a durable static dissipative polycarbonate to further minimize any potential for static electricity discharge around sensitive electronics, sensors or materials. The Intellistat Ion Air Nozzle produces an ionized airstream that is essential for removing static, dust, debris and particulate in sterile environments such as pharmaceutical and medical laboratories, clean rooms and electronics labs.

Applications

- · Precision parts assembly
- · Maintain charge neutrality in laboratory processes
- · Remove particles from parts and surfaces in clean environments
- · PCB manufacturing
- · Maintain cleanliness during electronics manufacturing, assembly and testing
- · Eliminate electrostatic discharge
- · Remove debris from medical products
- Clean lenses, glass containers and slides

Advantages

- · Mountable, hands-free operation
- · Quick change emitter point
- · Rapid static decay
- Low voltage operation
- · OSHA safe air outlet and noise level
- LED indicators for proper and improper functionality





How The Intellistat Ion Air Nozzle Works



After connecting the 24V power supply, activate the power switch (1) and turn on a compressed source to supply the 6mm push-in fitting (2) to activate the static eliminating ions and airflow. Proper or improper functionality is indicated by a green or red LED (3). The non-marring nozzle (4) provides quiet performance and OSHA compliance. The compact mounting bracket (5) is included to provide handsfree operation.

Intellistat Ion Air Nozzle Performance

Fic	ow	Air Cons	Sound Level	
PSIG	BAR	SCFM	SLPM	dBA
30	2.1	2.7	76.46	76
80	5.5	5.8	164.21	81

Intellistat Ion Air Nozzle Force / Discharge Time

Pressure Supply			Force*		Discharge Time**	
PSIG	BAR	LBS	ΟZ	GRAMS	SECONDS	
30	2.1	0.02	0.32	9.1	1.2 sec.	1000V down to 100V
30					1.2 sec.	5000V down to 500V
80	5.5	0.1	1.6	45.4	0.6 sec.	1000V down to 100V
00	5.5				0.6 sec.	5000V down to 500V

* 12" (305mm) from target. **Discharge rate taken from 1" away.

Intellistat Ion Air Nozzle					
Model #	Model # Description				
8505	Intellistat Ion Air Nozzle includes 24VDC Power Supply with Power Cable, 10 feet x 6mm OD compressed air tubing and mounting bracket.				

Accessories and Components

	Model #	Description	
ſ	9004	Automatic Drain Filter Separator, 1/4 NPT, 43 SCFM (1,218 SLPM)	
ſ	9008 Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,4		
7905 Stati		Static Meter	
ſ	902067	24VDC Power Supply	

Corporation

Intellistat Ion Air Nozzle Specifications



Certifications: The Intellistat Ion Air Nozzle is UL listed and CE and RoHS compliant.

Power Supply Input: 100-240VAC - 50/60 Hz 0.7A Max

Power Supply Output: EXAIR Model 902067 Power Supply (24VDC, 1.0A Max) is required for Intellistat Ion Air Nozzle operation. Included with Intellistat Ion Air Nozzle.



Electrical Hazard: Shockless

(less than 40 microamperes short circuited)

Do not use near flammable materials or gases.

Balance: ±30V

Operating Temperature: $32^{\circ}F$ to $105^{\circ}F$ (0-41°C) Do not use near flammable materials or gases.

Materials of Construction:

Plastic Parts: Static Resistant Polycarbonate Emitters: Stainless Steel

Gas Input: 30psig - 125psig

Clean Dry Compressed Air or Nitrogen

Air Connection: 6mm tube

Cleanroom Classification: ISO 14644-1 Class 5, operational.

Intellistat Ion Air Nozzle Dimensions







