

Ionizing Air Nozzles



Air Snake™

AirSnake 1 (AS-1)

The AirSnake 1 (AS-1) is a hands-free flexible ionizing nozzle that can be positioned to produce a clean ionized stream onto a targeted location. The AirSnake uses a .2 micron filter with filter replacement required quarterly. It is powered by the AirFlow Controller (see reverse side), and can be mounted anywhere using the cleanroom-compatible Velcro® fasteners on the base. The nose cone on the AirSnake meets OSHA pressure relief requirements and contains easily replaced Class 1 electrodes.

The AirSnake 2 (AS-2) includes a foot pedal valve for on/off air control.

Features

- Easily positioned
- Hands-free operation
- Uses clean dry air or nitrogen
- Meets all OSHA safety standards
- Foot pedal model optional

AN2 / AN6 Nozzles

The AN2 PulsePoint Air Nozzle fits at the end of the gas line to provide focused and continual ionization. It eliminates potentially harmful static charges in seconds. The small size of the AN2 enables the nozzle to be mounted on any piece of equipment in physically restrictive areas where static or surface particle contamination is a problem.

The AN6 In-Line Ionizing Air Nozzle fits where needed on the end or in the middle of the air or nitrogen supply line. It allows ionized gas to be directed through tubing to areas not normally accessible.

Both nozzles are powered by the AirFlow Controller (see reverse side).

When ultra-clean air is required, the PGF8 filter easily screws into the cavity of the AN2 or AN6 air nozzle, bringing particles down to .2 microns in size.

Features

- Rapidly removes harmful static charges
- Small footprint for easy positioning in physically restrictive areas
- Installed where needed along the line
- Filter available for ultra-clean air

Typical Applications

- Semiconductor wafer processing
- Electronics assembly
- Lab and research operations

Ionizing Air Nozzles

Specifications

Air Snake (AS-1 / AS-2)

Decay Times

± 1000 V to ± 100 V in < 3 sec.
(measured at 6" using CDA at 30 PSI)

Applied Voltage 3.5–8 kV

Electrodes Replaceable Class 1

Air/Gas Supply

Inlet pressure: 5 PSI min.,
100 PSI max.

Air Flow

0.8 SCFM at 10 PSI
5.5 SCFM at 50 PSI
11.5 SCFM at 100 PSI

Inlet and Outlet Fitting

1/4" (6.4 mm)

Size 16.5" (419 mm) Top to Bottom

Weight 1 lb., 6 oz. (620 grams)

Body Material

PVDF (polyvinylidene fluoride)

Air Hose Material

1/4" OD x 3/16" ID Polyurethane Tube
1/4" NPT 7.5" Long

Flex Hose Material

1/2" ID Polyethylene

Color White

AS-2 Foot Pedal

Two 1/8" NPT Fittings

AN2 / AN6 Nozzles

Decay Times

± 1000 V to ± 100 V in < 3 sec.
(measured at 6" using CDA at 30 PSI)

Applied Voltage

3.5 – 8 kV

Electrodes Replaceable Class 1

Air/Gas Supply

Inlet pressure: 5 PSI min.,
100 PSI max.

Air Flow

1.0 SCFM at 10 PSI
6.5 SCFM at 50 PSI
13.5 SCFM at 100 PSI

Inlet and Outlet Fitting

1/4" NPT

Size 3.4" x 1.0" (86 mm x 25 mm)

Weight 6 oz. (170 grams)

Body Material Delrin

Color White

AirFlow® Controller

The AirFlow Controller provides power and control to the PulseGun 5 and PulseGun 8. A silent, non-particulating switch incorporated into the Controller allows ionizing voltages to be applied only when there is flow of air or nitrogen through the PulseGun.

All controls are located on the front panel of the Controller, making it convenient to mount above or below the work bench. The AirFlow Controller provides control of the ion balance with independent voltage level controls and Pulse or Steady State DC indicator lights.

Specifications

Size

5.75" x 5" x 1.65"
(14.6 cm x 12.7 cm x 4.19 cm)

Weight 22.5 oz. (639.7 grams)

Output Voltage Adjustable; 3.5 – 8 kV DC

Input Voltage

110-120 VAC/220 – 240 VAC,
50/60 Hz as required



Output Current Range 3 – 7 mA DC

Pulse Rate Dial

Dial Position	Frequency	Time
10 Hz	10 Hz	100ms
2.2 Hz	2.2 Hz	450ms
1.3 Hz	1.3 Hz	750ms
1.0 Hz	1.0 Hz	1000ms
SS	DC	steady state

Temperature Range

24° to 158° F (-10° to 70° C)

Air Supply Requirements

Recommended range: 5 – 100 PSI

Inlet and Outlet Fittings 1/4" (6.4 mm)

PGF8 Sub-Micron Filter

The PGF8 sub-micron filter is an external high-efficiency 0.2 - micron DynaFibre® filter designed to screw inside the nozzle cavity of the AirSnake, Air Nozzle 2 and Air Nozzle 6. The replaceable PGF8 filter has over 225 square cm of effective filtration area and an expected service life of three months. It is made of a polycarbonate housing with a filter media of hollow fiber. Replacement takes seconds and requires no tools.



Features

- Filters particles down to 0.2 microns
- Fits inside all nozzles
- Effective for up to three months
- Easy replacement



Static Control and Cleanroom Products

SIMCO

Static Control and Cleanroom Products

2257 North Penn Road

Hatfield, PA 19440

Tel: 215.822.2171

800.538.0750

Fax: 215.997.3450

<http://www.simco-static.com>

e-mail: simco@itw.com



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