



Ionizing Air Nozzle & Controller

orIONTM

Simco-Ion's orION Ionizing Air Nozzle and Controller provides high performance and reliability in a compact, compressed air nozzle. It has been designed for use in fixed applications on manufacturing lines, equipment, and tool applications in the telecommunications, consumer electronics, semiconductor and medical device manufacturing industries.

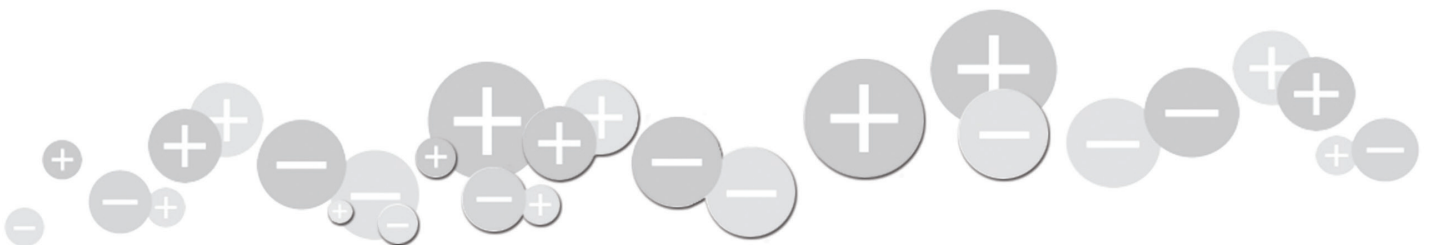
The orION features high blow-off force capability combined with fast removal of electrostatic surface charge. Reliable balance stability is maintained at better than $\pm 15V$. An easily replaceable 0.01-micron particle filter is positioned at the nozzle air exit to provide the highest confidence that clean air is delivered to sensitive product.




Features

- Compact nozzle and cable assembly
- Forceful gas-jet nozzle
- Integrated filter within the nozzle
- Remote operation of ionization and nozzle gas flow
- Ionization balance adjustments at nozzle and at controller

Benefits

- Perfect for tight-constrained applications
- Fast, effective charge neutralization and blow-off cleaning
- Contaminate free gas discharge
- Offers control of orION from most convenient operator location
- Convenient balance optimization



orION	
Input Voltage	120 VAC, 60 Hz, 0.2A; 230 VAC, 50 Hz, 0.1A
Discharge	<2 sec @ 6" (15.2 cm), 30 psi (±1000-100V) <1 sec @ 2" (5.08 cm), 60 psi (±1000-100V)
Balance	0V ±15V
Cleanroom Class	ISO 14644-1 Class 5
Air Supply	Input: Clean Dry Air, Nitrogen, or CO ₂ Pressure: 100 psi (7 bar) max; pressure relief in nozzle complies with OSHA requirements Flow: 2.4 scfm @ 30 psi (2 bar); 4.6 scfm @ 60 psi (4 bar); 7.4 scfm @ 100 psi (7 bar) Connection: 1/4" NPT (female) Filter: 0.01-micron rating
Audible Noise	76 dB @ 30 psi (2 bar); 89 dB @ 60 psi (4 bar); 97 dB @ 100 psi (7 bar); measured 24" (61.0 cm) from nozzle
Connector	4 position, keyed circular
Ozone	<0.5 ppm measured @ 12" (30.5 cm)
Operating Env	32-104°F (0-40°C); 30-70% RH, non-condensing
Dimension	Nozzle: see dimensional drawing
Weight	Nozzle: 0.41 lb (0.185 kg) Air Hose: 0.08 lb/ft (0.115 kg/m)
Warranty	2 year limited warranty
Certification	  
Control Module	
Power	120 VAC, 50/60 Hz, .10A, 230 VAC, 50/60 Hz, .05A
Pressure	Clean Dry Air (CDA) or Nitrogen 1/4" NPT connector, female (100 psi/7 bar max)
Enclosure	Powder-coated steel
Dimension	7.87"H x 5.12"W x 3.37"D with flanges (19.9 x 13.0 x 8.56 cm)
Weight	6.0 lb (2.72 kg)

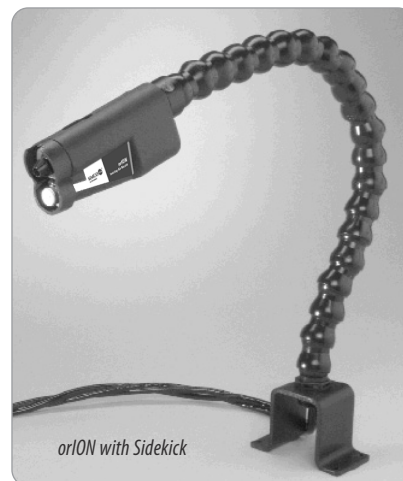
1. Tested in accordance with ANSI/ESD STM3.1-2015.

Ordering Information

4009045-01	orION, 120V, 7' cable/hose assembly, 60 Hz, UL, cUL, North America
4009046-01	orION, 230V, 7' cable/hose assembly, 50 Hz, cUL, CE, Continental Europe
4009220-01	orION, 230V, 7' cable/hose assembly, 50 Hz, CE, United Kingdom
4015645-01	orION, 230V, 7' cable/hose assembly, 50 Hz, CE, China
4012209-01	orION, 120V, 5' cable/hose assembly, optical sensor, 60 Hz, UL, cUL, North America
4012210-01	orION, 230V, 5' cable/hose assembly, optical sensor, 50 Hz, cUL, CE, Continental Europe
4012211-01	orION, 230V, 5' cable/hose assembly, optical sensor, 50 Hz, CE, United Kingdom
4009245-01	orION, 120V, Sidekick (hands-free stand), 60 Hz, UL, cUL, North America
4009246-01	orION, 230V, Sidekick (hands-free stand), 50 Hz, cUL, CE, Continental Europe
4009449-01	orION, 230V, Sidekick (hands-free stand), 50 Hz, CE, United Kingdom
4015646-01	orION, 230V, 7' Sidekick (hands-free stand), 50 Hz, CE, China
4012212-01	orION, 120V, Sidekick (hands-free stand), optical sensor, 60 Hz, UL, cUL, North America
4012213-01	orION, 230V, Sidekick (hands-free stand), optical sensor, 50 Hz, cUL, CE, Continental Europe
4012214-01	orION, 230V, Sidekick (hands-free stand), optical sensor, 50 Hz, CE, United Kingdom
5051416	Filter Premium Replacement Kit (2 per pkg)
4107399	orION Foot Activation Switch

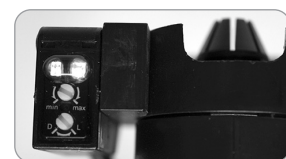
orION with Sidekick Flexible Neck Stand

Options include the Sidekick, flexible neck stand and a foot switch to activate the orION nozzle. The switch connects to the power supply and when depressed, activates both airflow and power to the ion emitter assembly. A red LED on the nozzle indicates power.

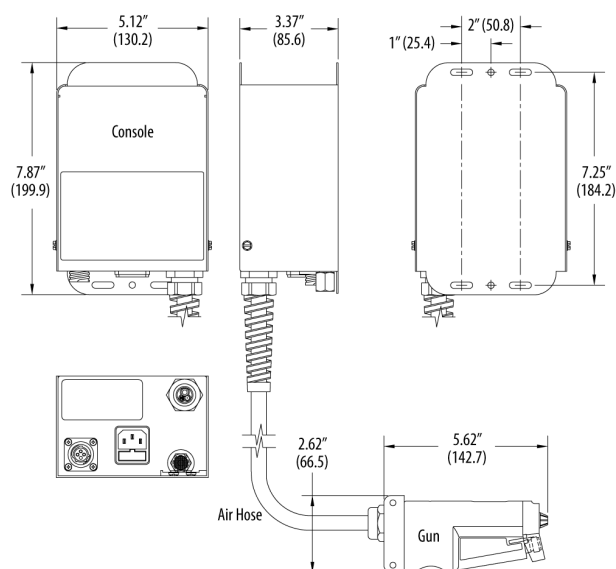


orION with Optical Sensor

For automated assembly, all versions of the orION are available with an optional Optical Sensor, which automatically activates the nozzle when an object is in range. The Optical Sensor has an "adjustable range" from 1-30 inches.



Dimensional Drawing (in/mm)



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