SIMCO ION™
An ITW Company

Ionization Solutions

WWW.SIMCO-ION.COM

Ionizing Air Gun & Controller

TOP GUN™

Simco-Ion's Top Gun Ionizing Air Gun is a high-performance ionizing air gun designed for a wide variety of electronic manufacturing, medical and assembly applications. Balanced to 0±15V, the Top Gun features high blow-off force and low air consumption providing high-efficiency cleaning and maximum static charge decay. A filter at the exit of the gun ensures that the air is clean.

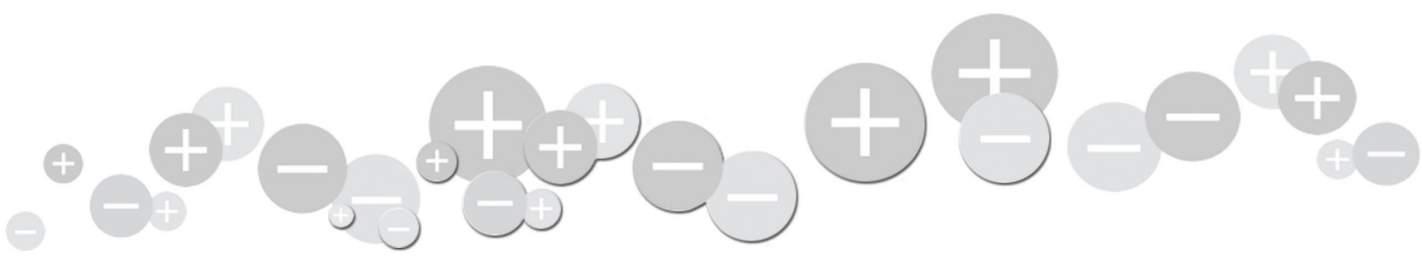
The gun body is lightweight but durable. It features a light-touch trigger, making it comfortable even for extended use. All functionality is built into the gun, including a flow control valve, a balance adjustment for calibration, and a two-level LED which indicates both power and ionization. Both the gun and cable are static dissipative. A hanger is provided for easy mounting.

Features

- Lightweight, ergonomic design
- Flow control valve for adjustable airflow
- Electrically balanced ion output
- Integrated, replaceable filter-nozzle
- Ionization indicator light

Benefits

- Maximum user comfort prevents operator fatigue and increases productivity
- Airflow use that meets the specific application requirements
- Protects ESD sensitive components and assemblies
- Insures air contacting the target area is clean
- Eliminates the guesswork of ionization at the target area



Top Gun	
Input Voltage	120 VAC, 60 Hz, 0.2A; 230 VAC, 50 Hz, 0.1A
Discharge	1.3 sec @ 6″ (15.2 cm), 30 psi (±1000-100V) 0.5 sec @ 2″ (5.08 cm), 60 psi (±1000-100V)
Balance	0±15V
Cleanroom Class	ISO 14644-1 Class 5
Blow-off Force	0.4 lb @ 100 psi, 2″ diameter target 3″ from the gun
Air Supply	Input: 100 psi max; Clean Dry Air (CDA) or Nitrogen Flow: 2.4 scfm @ 30 psi (68 lpm, 2 bar); 4.6 scfm @ 60 psi (130 lpm, 4 bar); 7.4 scfm @ 100 psi (210 lpm, 7 bar) Pressure: Pressure relief in nozzle complies with OSHA requirements Filter: 0.01 micron rating; replacement filters available Connection: 1/4″ NPT (female) Air Hose: 7′ or 14′ standard, 5′ or 14′ with optical sensor (integral to gun & controller)
Audible Noise	76 dbA @ 30 psi (2 bar) input; 89 dbA @ 60 psi (4 bar) input 97 dbA @ 100 psi (7 bar) input; measured 24″ (61.0 cm) from nozzle
Ozone	0.001 ppm; measured 18″ (45.7 cm) from gun, operation @ 15 psi (1 bar)
Operating Env	32-104°F (0-40°C); 30-60% RH, non-condensing
Enclosure	Gun: Static Dissipative Polycarbonate/ABS blend Air Hose: Static Dissipative Polyurethane
Dimension	See the dimensional drawing
Weight	Gun: 0.41 lb (0.185 kg); Air Hose: 0.08 lb/ft (0.115 kg/m)
Warranty	2 year limited warranty
Certification	CE, TÜVRheinland, KC, RoHS2, UKCA
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

4005105-01	Top Gun 3, 120V, 7' Cable/Hose Assembly, 60 Hz, UL, cUL, North America
4005106-01	Top Gun 3, 230V, 7' Cable/Hose Assembly, 50 Hz, CE, cUL, Continental Europe
4009894-01	Top Gun 3, 230V, 7' Cable/Hose Assembly, 50 Hz, CE, United Kingdom
4015642-01	Top Gun 3, 230V/50 Hz, 7 ft, Cable/Hose Assembly, China CE
4006599-01	Top Gun 3, 120V, 14' Cable/Hose Assembly, 60 Hz, UL, cUL, North America
4006600-01	Top Gun 3, 230V, 14' Cable/Hose Assembly, 50 Hz, CE, cUL, Continental Europe
4009895-01	Top Gun 3, 230V, 14' Cable/Hose Assembly, 50 Hz, CE, United Kingdom
4015643-01	Top Gun 3, 230V/50 Hz, 14 ft, Cable/Hose Assembly, China CE
4012199-01	Top Gun 3, 120V, 5' Cable/Hose Assembly, optical sensor, 60 Hz, North America
4012200-01	Top Gun 3, 230V, 5' Cable/Hose Assembly, optical sensor, 50 Hz, CE, Continental Europe
4012201-01	Top Gun 3, 230V, 5' Cable/Hose Assembly, optical sensor, 50 Hz, CE, United Kingdom
4012202-01	Top Gun 3, 120V, 14' Cable/Hose Assembly, optical sensor, 60 Hz, North America
4012203-01	Top Gun 3, 230V, 14' Cable/Hose Assembly, optical sensor, 50 Hz, CE, Continental Europe
4012204-01	Top Gun 3, 230V, 14' Cable/Hose Assembly, optical sensor, 50 Hz, CE, United Kingdom
4006992-01	Top Gun 3, 120V, Sidekick (hands-free stand), 60 Hz, UL, cUL, North America
4007005-01	Top Gun 3, 230V, Sidekick (hands-free stand), 50 Hz, CE, cUL, Continental Europe
4015644-01	Top Gun 3, 230V/50 Hz, Sidekick (hands-free stand), China
4012205-01	Top Gun 3, 120V, Sidekick (hands-free stand), optical sensor, 60 Hz, North America
4012206-01	Top Gun 3, 230V, Sidekick (hands-free stand), optical sensor, 50 Hz, CE, Continental Europe
5051416	Filter Premium Replacement Kit (2 per pkg)

Top Gun w/Optional Sidekick

The Top Gun with Sidekick offers hands-free operation and flexible positioning during assembly and manufacturing processes. A foot pedal controls both ionization and airflow, which reduces compressed air costs and extends the life of the ionizer. The flexible gun mount allows the operator to focus the ionized airflow where it is needed. The stand includes a steel bracket for easy bench-top mounting.

- Fully adjustable 18-inch neck focuses the ionized airflow
- Tabletop bracket provides easy mounting
- Foot pedal permits hands-free operation

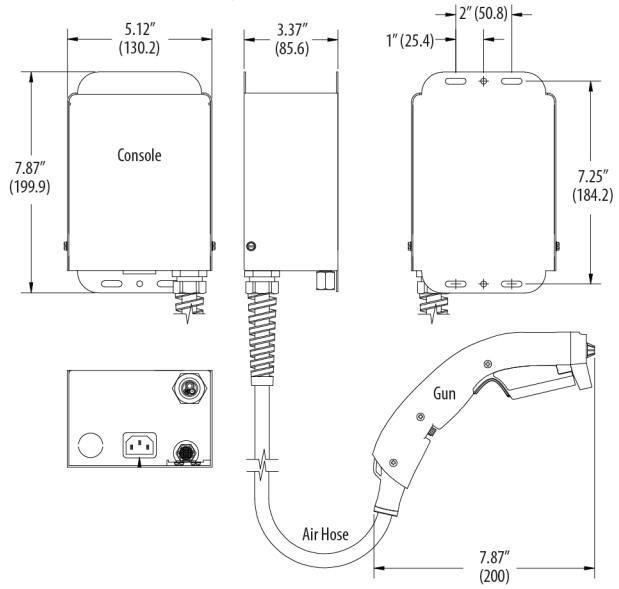
Top Gun with Optical Sensor

For automated assembly, all versions of the Top Gun are available with an optional Optical Sensor, which automatically activates the gun when an object is in range. The Optical Sensor has an "adjustable range" from 1-30 inches. Two LED indicators show when the optical sensor is turned on and when the object passing through the sensor area is automatically being ionized.

Applications

- Medical device manufacturing and packaging
- Precision parts assembly
- Particulate removal in optics
- Cleaning the glass or molded parts before finishing
- Cleaning thermo-formed trays

Dimensional Drawing (in/mm)



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