



SIMCO IONTM
An ITW Company

PRODUCT CATALOG

static neutralizing • static charging • web & sheet cleaning

Worldwide Leaders in Static Control

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About Simco-Ion

Simco-Ion is the unsurpassed leader in solving static control problems in a wide range of industries. Since 1936, Simco-Ion has distinguished itself by manufacturing innovative, high quality static control products and providing outstanding customer service and application expertise.

Simco-Ion U.S. Headquarters



Other Manufacturing Locations

Holland



Japan



China



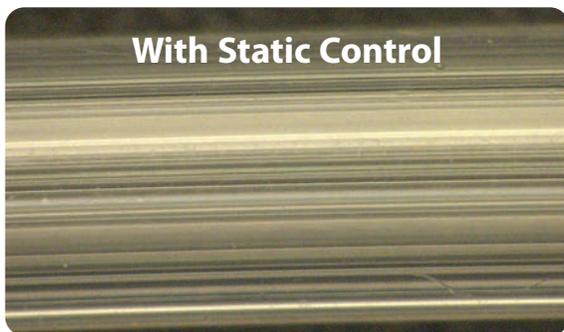
Why Is Static Control Important?

Managing static electricity is important for several reasons. The most notable being contamination control, operator safety, and minimizing process equipment issues that can occur due to high static charges. Contamination control is a significant issue in many manufacturing environments, especially in critical applications such as food, medical or pharmaceutical packaging.

Operator safety is also a critical concern because high static charges can cause significant electrostatic shocks to unsuspecting personnel, or worse, an electrostatic discharge in a solvent coating application could cause a fire hazard. The biggest issue for most manufacturers is that all of these problems resulting from static electricity impact their bottom-line.

Static electricity is best controlled by using active electrical ionizers to neutralize the charges. The most effective devices for eliminating static are strategically located in the process to manage the problems identified above.

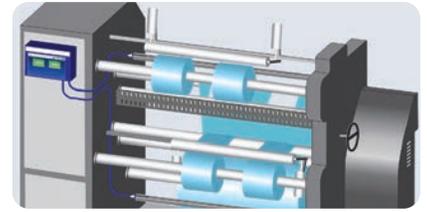
The equipment available ranges from basic static control to fully integrated systems that monitor the performance of the ionizer, provide real-time static level management, alarm signals to the PLC for critical process control and capabilities for quality assurance.



Catheter manufacturing after thirty (30) minutes of exposure.

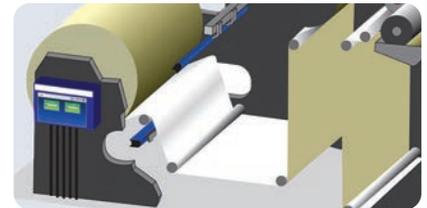
Converting

Simco-Ion's products provide solutions in critical converting processes that can be affected by static including bag-making, sheeting and slitting, laminating and coating, gravure printing, rewinding, trim collection, web cleaning and roll-to-roll changeover.



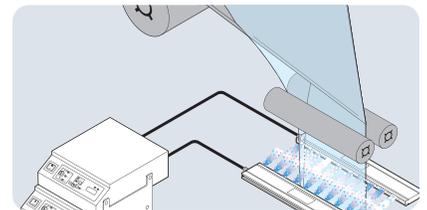
Plastic

Simco-Ion solves problems for a variety of plastics applications including film extrusion, injection molding, thermoforming, trim collection coating, laminating, chill roller pinning, blow molding and in-mold labeling.



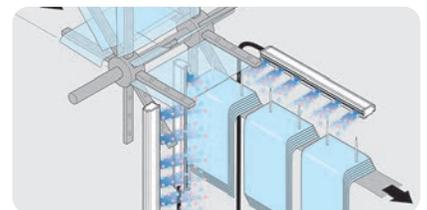
Printing

Today's print customers demand high quality printed material at competitive prices. Simco-Ion's static control products, cleaning systems and static bonding equipment guarantees that your customers will get higher quality printed materials. At the same time your production cost are lowered and throughput increased.



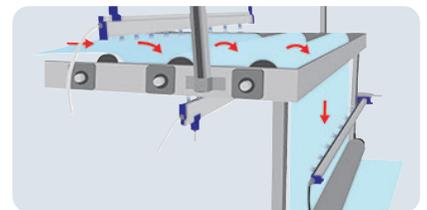
Packaging

Static charges can cause problems in many areas of packaging processes. Simco-Ion's products can eliminate these problems in a variety of applications including package printing, bottling, labeling, thermoforming, over-wrapping, trim collection, and form, fill and seal operations.



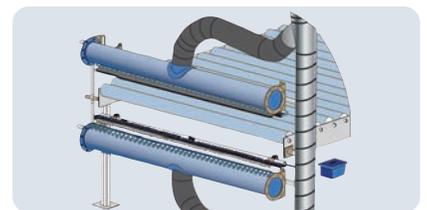
Medical

Simco-Ion offers products that will reduce rejects due to cross-contamination, provide more consistent repeatable results and help improve cycle times.



Automotive

Simco-Ion offers static eliminating products to the automotive manufacturing industry. Our air knives and blow-off systems are designed to provide heavy-duty cleaning or drying on both flat and contoured surfaces.



IQ Power™ HL Static Neutralizing System

Specialized components of the IQ Power HL Static Neutralizing System are approved for Class 1 Div 1 hazardous location installations, (Class 1, Div 1, Group D). These HL components leverage all the benefits of the standard system and are specifically designed and approved for HL applications.

The IQ Power HL System provides high voltage output power and processes all system intelligence to maintain and communicate complete static control with the Control Station.

These power units work with IQ Power HL Static Neutralizing Bars which are available in Speed and Hybrid configurations.

IQ Power Control Station



IQ Power HL Bar

Power Supplies

There are two power supply choices available:

- The **HL Power Supply** is approved for mounting **outside** the hazardous area
- The **HLC Power Supply** is approved for mounting **inside** classified hazardous locations



HL Power Supply



HLC Power Supply

IQ Power HL Sensor

The **IQ Power HL Sensor** allows the power units to operate in closed-loop feedback mode or can be used as a stand-alone monitoring system. It connects to the system through the **IQ Power Sensor Interface**. The Sensor Interface provides status indicators for up to 8 connected sensors.

- Digital technology offers higher accuracy and is impervious to noise
- Sensor is intrinsically safe allowing for easy installation **without** the use of conduit
- Communications cannot be corrupted due to data verifying algorithm



IQ Power™ Static Neutralizing System

Simco-Ion's **IQ Power Static Neutralizing System** is an unparalleled lineup engineered with technology that brings complete monitoring intelligence within a user friendly interface. Designed for use in rugged industrial applications and leveraging many patented features, IQ Power provides superior ionization performance.

This fully integrated system is simple to install. With our "smart addressing" technology, devices can be added in a snap.

- Full PLC integration
- User-controlled alarms
- Patented Auto-Tune technology
- Patented Dual Axis control
- Patented CLFB with charge sense technology
- Complete system monitoring for up to 10 addresses



IQ Power Control Station

The **IQ Power Control Station** is equipped with a full color touch panel interface. The Control Station combines data logging capabilities with user selectable time interval data points in addition to event logging. It works with both standard and HL systems. It also provides six Modes of operation:

- Fixed Mode for system optimization based on average web conditions
- Manual Mode for user adjusted output settings
- Auto-Tune Mode for consistent live web reading and optimization based on current conditions
- Closed-loop Feedback (CLFB) Mode allows the IQ Easy Modular Sensor bar to control output by pairing with neutralizing bar
- Balance Mode allows for precise control of ion balance on the IQ Easy LP Bar
- Pulse Mode allows for adjustment of the pulse time and pulse overlap. Pulse mode is available with the IQ Easy LP Bar and provides long-range static neutralization, without the necessity of air, for workstation and benchtop assembly areas



IQ Easy Modular Sensor Bar

The **IQ Easy Modular Sensor Bar** is an advanced non-contact electrostatic field meter designed to accurately measure and communicate static charge levels (up to 60 kV) while eliminating the time requirement and inaccuracy associated with handheld measurements.

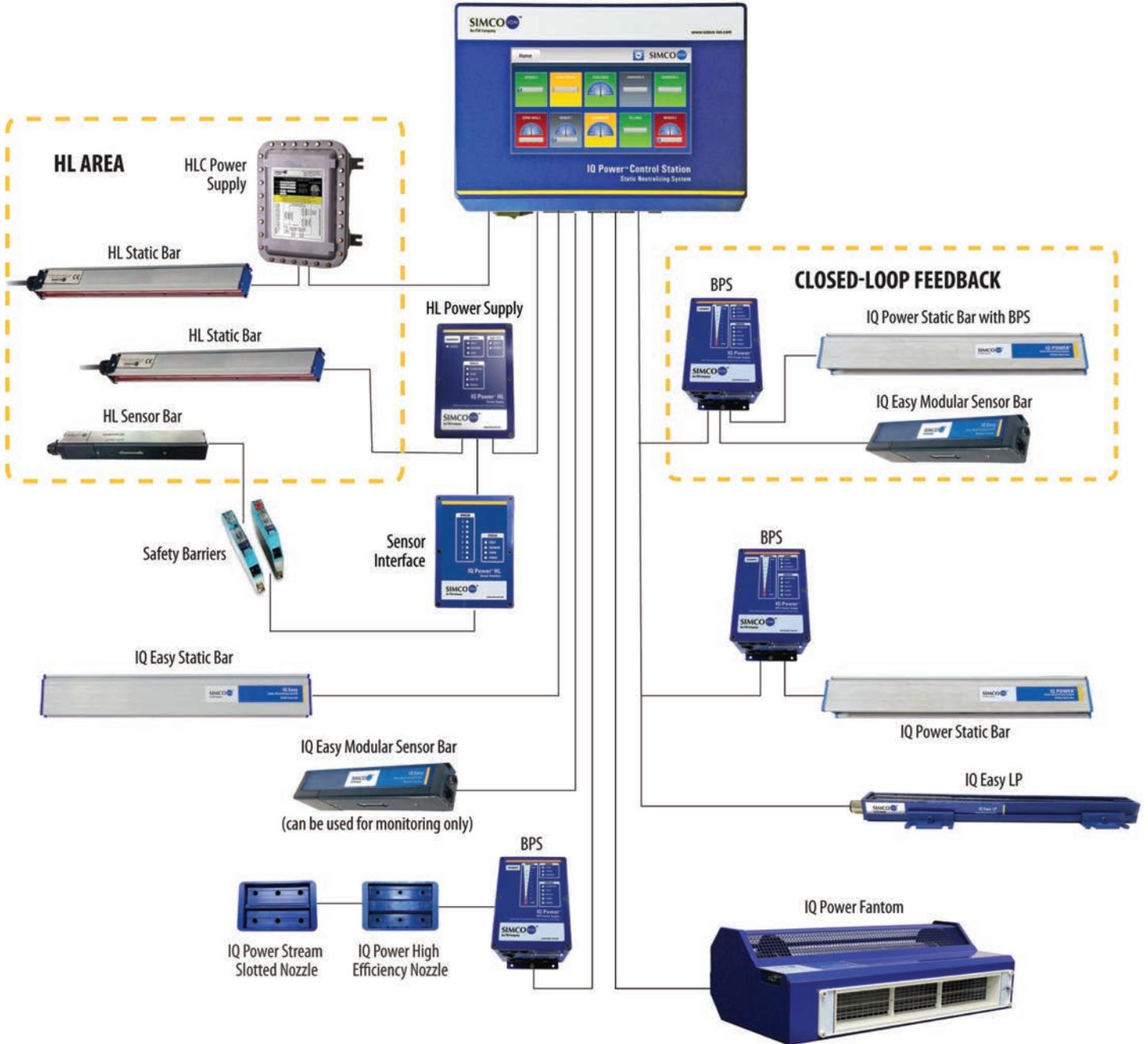
The Control Station offers high speed digital communication, user-configurable alarms, and optional PLC integration so that areas where static charge is a problem can be constantly monitored, and ionizer performance documented and improved via Closed-loop Feedback (CLFB).

- Connect up to 40 modular sensors to one control station
- Certificate of Calibration available
- Air purge connections for demanding environments
- Five communication protocols for PLC connection
- Configurable for static charging, neutralizing, or CLFB applications



IQ Power System Network

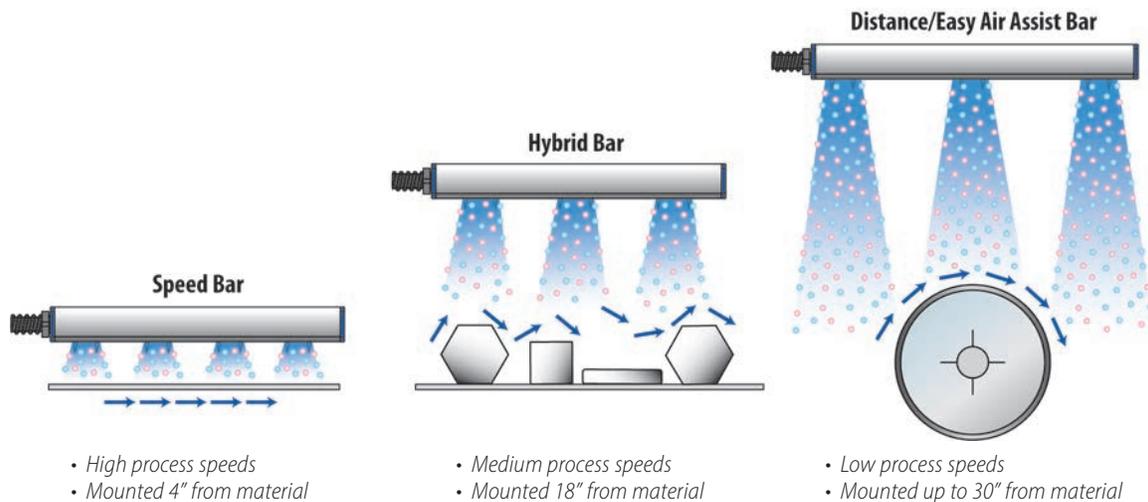
The IQ Power System can power and monitor up to ten addresses in one complete network through the Control Station. Devices are powered through the Control Station at 24 VDC input power. When used in stand-alone mode, devices are powered using an AC adapter.



IQ Power™ & IQ Easy™ Static Neutralizing Bars

Unlike older technology bars, the **IQ Power** and **IQ Easy** Static Neutralizing Bars are highly efficient with 100% effective length. Our neutralizing bars are shockless, DC powered and built for long lasting durability and low maintenance.

Static neutralizing bars all feature durable Tungsten emitters and are offered in over 85 different lengths and three varieties to suit your application based on the web speeds or operating distance. All bars include rugged mounting hardware.



IQ Easy LP Bar

The **IQ Easy LP Bar** is engineered to be the most compact and powerful ionizing bar with built-in high voltage power. Its high output power allows it to achieve the lowest possible residual charges in a wide range of applications. IP66 and ISO-6 certified.

- In high-speed web applications, it offers superior close-range ionization with the ability to mount to ground for unsurpassed performance in tight spaces
- In assembly applications, it provides long-range, balanced ionization—equal quantities of positive and negative ionization—for advanced performance where decay time tests are required



LOW PROFILE
0.75" HIGH

IQ Easy Air-Assist

The **IQ Easy Air-Assist Bar** features a shatterproof air tube to improve discharge performance at a longer range of distance plus all the benefits of IQ Easy Static Bar with light duty cleaning.



IQ Easy Static Neutralizing Bar

The **IQ Easy Static Bar** has an integrated high voltage power supply that requires only a low voltage input of 24 VDC, for a safe and clean install. IP-66 rated. Available in Speed and Hybrid configurations.



BUILT-IN
POWER SUPPLY



IQ Power™ Nozzle

Simco-Ion's **IQ Power Nozzle** is a shockless pulse DC ionizer engineered to operate at 7 kV and is compatible with the IQ Power Static Neutralizing System. Can be used with the IQ Power BPS power supply. IQ Power Nozzle users have worry free, continuous active monitoring. Choose between High Efficiency configuration for most applications or Slotted for applications that require a high amount of air.

- Flexible installation allows multiple nozzles to be positioned on a single wire run
- Continuous monitoring of performance and status
- IP-66 rated against particulate and splash
- Communicates with the control station

IP66 RATED



High voltage cables sold separately in 10, 20, 30 ft. lengths, which can be cut to the exact requirements of your application.

GREAT FOR MOST APPLICATIONS



High Efficiency Configuration

GREAT FOR AIR RINSING



Slotted Configuration

Specifications

Input Voltage	7 kVDC (IQ Power speed mode) using specified HV cable
Air Input	80 psi (max)
Air Input Connection	1/8 NPT straight or right angle for use with 1/4" O.D. tubing
Air Consumption	10 scfm @ 30 psi; high efficiency 1.5 scfm @ 30 psi
Temperature	60°C (140°F) max
Dimensions	2.1"L x 2.1"W x 1.3"H (individual nozzle)
IP Rating	IP-66

IQ Power Static Neutralizing Bar

The **IQ Power Static Bar** connects into the BPS power supply. Plug and play operation. Available in Speed, Hybrid and Distance configurations.



IQ Power™ BPS

The **IQ Power BPS** power supply is designed for use with the IQ Power Static Neutralizing bars and nozzles. It's industrial design provides patented one touch calibration, full ionization output readings including clean bar and fault indicators.

The patented connector system automatically senses bar type to adjust frequency and voltage.



Ioncell™

Simco-Ion's **Ioncell** In-line lonizer enables stunning performance in longer-length delivery lines by overcoming traditional ion recombination limitations; enabling focused ionized air to be delivered to previously inaccessible locations.

- Powered by low voltage power supply or through 24 VDC input
- Compact design that pipes ions through long tubes
- Various output attachments available
- Can daisy-chain up to 6 units

Specifications

Input Voltage	24 VDC
Balance	+/-50V
Air Pressure	50 psi (max)
Emitters	Tungsten
Connectors	4 position modular; DC power IN
Indicators	Green-Power On; Red-fault indicator (TTL level alarm output)
Temperature	32-122°F (0-50°C)
Dimensions	2.5"H x 1.3"W x 4.5"L (64 x 33 x 115 mm)



Ring Output Applicator



Air Knife Output Applicator



Split Tube

Output Tube Configuration



Single Tube

Top Gun™

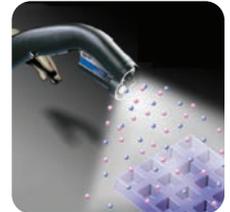
Simco-Ion's **Top Gun** features high blow-off force to provide efficient cleaning and rapid static discharge. All control functions are built into the gun for easy operator use: airflow control and a two-level LED to indicate both power on and ionization.

The Sidekick flexible neck frees the operator's hands during assembly and manufacturing processes. A foot pedal controls both ionization and airflow, and the flexible gun mount allows the operator to focus the ionization airflow where it is needed. It includes a steel bracket for easy benchtop mounting.

- Balance to ±15V
- Static dissipative lightweight, ergonomic handle
- Operates on either compressed air or nitrogen
- Adjustable airflow control in handle



Sidekick



Neutralizing
Thermoformed Trays

Specifications

Discharge Time	1.0 sec at 6", 30 psi; 0.5 sec at 2", 60 psi
Air Pressure	100 psi (max) clean dry compressed air
Air Flow	2.4 scfm at 30 psi; 4.6 scfm at 60 psi; 7.4 scfm at 100 psi
Cable	10' standard, 20' optional
Weight	1.8 lbs (gun and 10' hose assembly)
Certifications	CE cULus

Cleanflex Easy

The **Cleanflex Easy** ionization gun is designed with state-of-the-art features to clean electrostatically charged surfaces or parts. With a 24 VDC built-in power supply, the Cleanflex Easy eliminates the need for cumbersome high voltage cables and separate power supply unit. The full hand trigger allows for easy control of air flow without the strain to one finger. With the specially designed opening of the nozzle, the Cleanflex Easy Gun produces a very compact air stream with lower noise and reduced air consumption when compared to other anti static guns.



Specifications

Power Supply	24 VDC (max), 0.3A
Connector	M12, female, 5 pole
Pinning	1:24 VDC, 2:HV OK, 3:0V/GND, 4:24 VDC, 5:Not connected
Compressed Air	1-7 bar, clean and free from oil
Connection	Quick disconnect type for ø8 mm [5/16"] hose
LED Indicators	Flashing Green Fast (5 Hz): Starting up Flashing Green Slow (1x every 3 seconds): Stand-by Continuous Green: Air pressure OK & HV ON Red: Failure check wiring or contact Simco-Ion

Cobra™

Simco-Ion's **Cobra** Static Neutralizing Blow-Off Gun provides a powerful blast of ionized air for cleaning and neutralizing large surfaces in rugged industrial environments. This lightweight, durable gun features an ergonomic handle to regulate blow-off force. An optional nozzle produces a fan-shaped air blast for covering large areas.

Specifications

Discharge Time	0.6 sec at 6" & 100 psi (decay 5000-500V, 20 pf plate)
Air Pressure	100 psi (max) clean dry compressed air
Air Flow	14 scfm at 50 psi, 22 scfm at 100 psi
Cable	20' standard, 40' optional
Power Supply	G Units
Weight	1.5 lbs (gun and 20' cable)
Certifications	CE cULus



G Unit Power Supply

Curtain Transvector

Simco-Ion's **Transvector's** are highly efficient "air knives" or "curtains" of compressed air for superior blow off of dust and dirt. Our patented technology results in significantly less noise and less compressed air usage while outperforming other standard air knives with greater air amplification and a more uniform airflow. Pair the Ionizing Curtain Transvector with Simco-Ion's IQ Power or IQ Power HL static bars which are approved for Class 1 (Division 1, Group D) hazardous locations.

Typical Use

Label Application: Eliminates dust, dirt and static charges for better label placement and adhesion.

Bottle Filling: Eliminates dust from exterior of bottles.

Injection Molding: Ionized air directed into mold cavity causes parts to release.



Specifications

Air Inlet	0.25" NPT
Air Pressure	10 psi (min) to 100 psi (max) clean dry air, oil free
Air Flow	4.3 scfm per inch at 80 psi
Power Supply	Based on static bar
Cable	10' standard length
Mounting	Transvectors may be mounted directly to air line or static bar mounting studs may be used on selected models
Dimensions	6", 12", 24" bar lengths in stock; 84" available

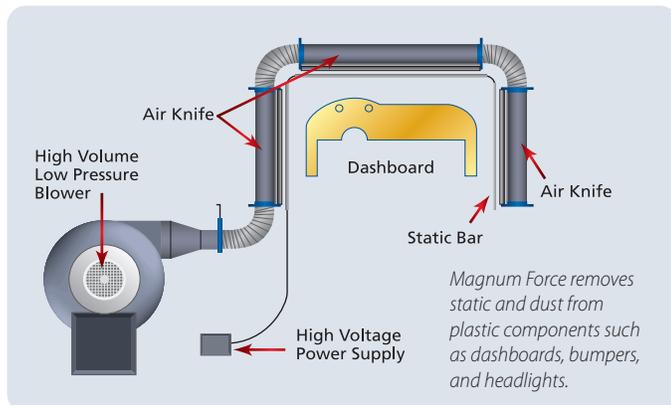
Magnum Force™

Simco-Ion's **Magnum Force** Air Knife Systems are custom-designed to provide superior heavy-duty surface cleaning or drying. When combined with Simco-Ion's static neutralizing bars, Magnum Force becomes a powerful tool for removing dust and dirt from flat or contoured surfaces. When liquid removal is required, Magnum Force systems are ideal because of their powerful forced air thrust, low operating cost, and efficient operation.

Typical Use

Finishing: Eliminating dust, dirt and static charges from autobody surfaces prior to entering paint booth.

Typical Magnum Force Installation



NO COMPRESSED AIR REQUIRED

Blower

- 208-230V, 460V or 575V, 50/60 Hz; 3-phase
- AMCA certified
- Silencer/Filter: 10 micron replaceable cartridge in coated steel casing
- Compatible with IQ Power, IQ Power HL, IQ Easy, and Static Bars



Specifications

Enclosure	Anodized with powder coated ends
Dimensions	Up to 400" lengths in 6" increments x 4" & 6" dia. (custom lengths available)

Aerostat® XC2

Simco-Ion's **Aerostat XC2** Blower provides complete wide area ionization protection and is designed and built for reliable, long-term static control. The XC2 offers outstanding coverage for larger areas with <12 second discharge times at 6 feet (1.8m) distance from the face of the blower. The weight-saving design allows the Aerostat XC2 to be mounted above the work surface, which is especially effective for flat-panel display module assembly.

Specifications

Input Voltage	100-240 VAC, 50/60 Hz
Coverage	3'W x 6'L (91 x 183 cm) (effective coverage area is up to 6' from the blower face)
Air Volume	95 cfm (low), 150 cfm (high fan speed)
Enclosure	Powder-coated aluminum chassis
Dimensions	14.13"W x 7.2"H x 6.55"D (35.9 x 18.3 x 16.6 cm) with stand
Weight	7 lbs (3.2 kg) with stand
Certifications	CE cULus



Aerostat® PC2

Simco-Ion's **Aerostat PC2** Ionizing Air Blower provides localized coverage with superior charge decay efficiency. The Aerostat PC is designed to provide ionization to a targeted work area.

- Discharge time of <2.0 seconds at 1 foot
- Fast, targeted neutralization of static charges
- Lightweight, compact and quiet for unobtrusive use
- Local alarm LEDs, Facility Monitoring System (FMS) connection and optional audible alarm
- ±10V self-balancing ("Micropulse") technology
- Built-in emitter point cleaner
- Optional integrated heater for warm airflow

Specifications

Input Voltage	100-230 VAC, 50/60 Hz, 0.2A, 10W max, fuse 0.63A 250V Slo-Blo 120V Heater Option: 100-120 VAC, 50/60 Hz, 2.0A, 250W, fuse 2.5A 250V Slo-Blo 220V Heater Option: 220-230 VAC, 50/60 Hz, 1.0A, 250W, fuse 1.6A 250V Slo-Blo
Coverage	1'W x 4'L (30 x 122 cm) area
Air Flow	129 cfm (high fan speed)
Enclosure	Powder-coated aluminum
Dimensions	9.1"H x 6.8"W x 3.3"D (23.1H x 17.3W x 8.4D cm) with stand
Weight	2.8 lbs (1.25 kg) with stand with skid resistant rubber feet
Certifications	CE cULus



IQ Power Fantom™

The **IQ Power Fantom** Wide-Format Ionizing Blower provides the highest speed and widest coverage for industrial applications. Designed to deliver maximum charge neutralization, the Fantom offers four modes of operation and has unique monitoring capabilities when used with the IQ Power Control Station.

- Extended range effective up to 20'
- Remote on/off
- Replaceable ionizer/duct assembly
- Easily replaceable dust filters
- Fault/warning/power indicators
- Provides balanced ionization
- Easy remote automatic self-cleaning
- Monitoring capabilities with Control Station



Specifications

Input Voltage	120, 60 Hz, 2.0A; 230V, 50/60 Hz, 1A (fan speed high)
Coverage	2'x20' area
Air Flow	Variable, 600 cfm max
Air Filter	Replaceable polyurethane foam 10 ppi
Audible Noise	64 dBA measured 2' in front of blower at high speed
Mounting	Existing mounting studs or optional tilt bracket
Enclosure	Powder coated steel
Dimensions	12.75"D x 26"W x 8"H
Weight	31 lbs
Certifications	

Phoenix™

Simco-Ion's **Phoenix** Extended Range Ionizing Blower provides optimum static charge neutralization for a wide variety of industrial applications. Designed to efficiently cover a wide area with an inherently balanced ion stream, the Phoenix ionizer is powerful and portable.

- Extended range effective up to 10'
- Variable speed fan control
- Easily replaceable filters
- Portable floor stand available
- High voltage indicator
- Point cleaner allows for easy maintenance



Specifications

Input Voltage	120V, 60 Hz, 2.0A
Coverage	2' x 10' area
Air Flow	Variable, approximately 300 cfm
Air Filter	Replaceable foam filter, 25 ppi
Audible Noise	68 dBA measured 2' in front of blower at high speed
Mounting	Optional floor stand 50-74" in 4" steps
Enclosure	Aluminum
Dimensions	16.38"W x 9.75"H x 13.25"D
Weight	16.1 lbs
Certifications	

Chargemaster VCM™

Simco-Ion's **Chargemaster VCM** is programmable for either voltage or current control mode to supply the high voltage for charging bars and various charging applicators used to electrostatically bond materials. The Chargemaster VCM provides a simple and economical solution for a wide range of production processes maximizing the efficiency of the application.

The VCM is available in three versions; negative output voltage, positive output voltage and outputs of both positive and negative polarities (Bi-Polar).

- Run up to four charging bars or applicators
- Capable of voltage or current control mode operation
- Simple programming and setup
- Remote operation capability
- Short circuit protected output with status indicators
- Powerful industry leading 5 mA pinning current

Specifications

Input Voltage	85-264 VAC @ 47-63 Hz (self adjusting)
Output Voltage	0-30 kV @ 5 mA; 0-60 kV @ 2.5 mA
Voltage Rise Time	Under 70 msec
Output Ports	4
Remote I/O	Analog Signals: 0-20/4-20 mA or 0-5/0-10 VDC via D/sub connector
Remote On/Off	via D/sub connector and programmable menu
Temperature	32-131°F (0-55°C)
Enclosure	Steel
Dimensions	30 kV: 10.5"W x 4.25"H x 13.5"D; 60 kV: 10.5"W x 4.25"H x 15"D
Weight	16.5 lbs
Certifications	CE



Bi-Polar (VCM-BP)



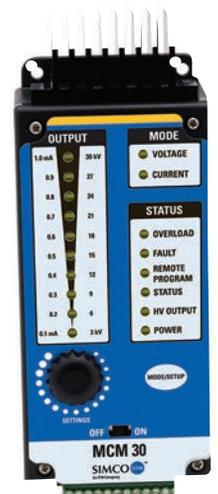
Wall mount

MCM 30™

The **MCM 30** is a powerful high efficiency charging generator that supplies high voltage for charging bars and various charging applicators. The MCM 30 packs a punch in a small size and provides simple and economical solutions for a wide range of production processes.

Specifications

Input Power	24 VDC, 3A, 75W (max)
Output Power	3-30 kVDC; 0.1-1 mA (single output)
Temperature	32-104°F (0-40°C)
Interface Connections	(12) position Terminal block and multi-purpose interface connector
Mounting	Integrated mounting brackets
Enclosure	ABS Plastic (UL94V-0), color: black
Dimensions	7.75"L x 3.00"W x 2.62"D (197L x 76W x 67D mm)
Weight	1.7 lb (0.77 kg)



Pinner T™

Pinner T Bars are energized by our charging generators to deliver a safe charge to temporarily pin or bond materials together. Quality construction and engineered for performance, the Pinner Series will help you achieve your Electrostatic Pinning goals whether working with IML or lamination. Pinner T is equipped with Tungsten emitter pins for longer life and lower resistance for greater pinning performance. Paired up to 5 mA of pinning from VCM, you get unrivaled pinning performance.

Specifications

Input Voltage	±30 kVDC (±60 kVDC with special mounting & insulation precautions)
Output Current	1.5 mA/ft max
Operating Environment	32-200°F (0-90°C); 70% RH (max), no dewing permissible
Operating Distance	1/2" to 3" (application & voltage dependent)
HV Cable	Flexible, abrasion-resistant, silicone outer jacket rated to ±60 kV
Enclosure	Glass filled vinylester (rugged, impact resistant, light grey color)
Weight	2.1 lb/foot



Pinner LP™

With its low profile design, the **Pinner LP** Bar is the smallest in Simco-Ion's Charging series making it easier to fit in tight spaces. A large variety of lengths are available allowing for the perfect fit. The Pinner-LP is engineered to provide stunning pinning performance for multiple applications, especially in roll-to-roll changeover.

Specifications

Input Voltage	±30 kVDC max
Output Current	Continuous Use: 0.75 mA/ft max; Intermittent use: 1.50 mA/ft max
Operating Environment	32-200°F (0-90°C); 70% RH max, no dewing permissible
Operating Distance	1/2" to 3" (application & voltage dependent)
Dimensions	1"W x 1.9"H x (EL+2")L (EL = effective length 3-144" in 3" increment)
Weight	1.4 lb per foot



Pinner™ Charging Applicators

The **Pinner Series** Static Charging Applicators consists of the Linear Pinner, 5-Point and Pinner Claw. Pinner applicators are arc resistant to avoid suspension of static charge and loss of pinning action.

- Current limited design for operator and equipment protection
- Available with replaceable pins to ensure maximum performance
- Minimized EMI and RFI generation, preventing disruption of controls



Linear Pinner

5-Point Pinner

Pinner Claw

Specifications

Power Supply	±30 kV	
Points	Linear Pinner	4 fixed
	5-point Pinner	5 fixed
	Pinner Claw	3 removable
Temperature	500°F (260°C)	
Dimensions	Linear Pinner	4.75" x 0.75" dia (120 x 19 mm)
	5-point Pinner	7" x 0.75" dia (178 x 19 mm)
	Pinner Claw	8.5" x 0.75" dia (216 x 19 mm)

Conveyostat™

Simco-Ion's **Conveyostat** Systems are designed to provide in-line ionization for neutralizing static charges on materials in pneumatic conveying systems to prevent them from becoming jammed.

The Conveyostat unit is typically mounted at the input to the cyclone or collection vessel so that trim materials are neutralized as they pass through the unit.

- Neutralizes conveying trim materials including metalized films
- Resistively coupled static bars enhance safety and prevent hard arcs
- Dual-phase ion generation ensures high neutralization rates
- Straight, flanged and rolled edges available
- Power supply includes short circuit detection
- Multiple diameters available

Specifications

Input Voltage	230 VAC, 60 Hz, 0.25A; 120 VAC, 60 Hz, 0.5A
Cables	Cable kits available 25'-100'
Power Supply	Simco-Ion's BPS-C Power Supply
Enclosure	Stainless steel
Dimensions	10-48" L x 1.5-24" dia. (larger sizes available)
Connections	K&B Flanges, compression coupling, rolled edge
Certifications	 US

COMPATIBLE WITH METALIZED FILMS



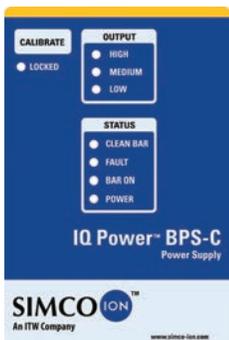
Indoor unit with mounting flanges



Indoor unit without flange/straight edge



Indoor unit with quick disconnect edge

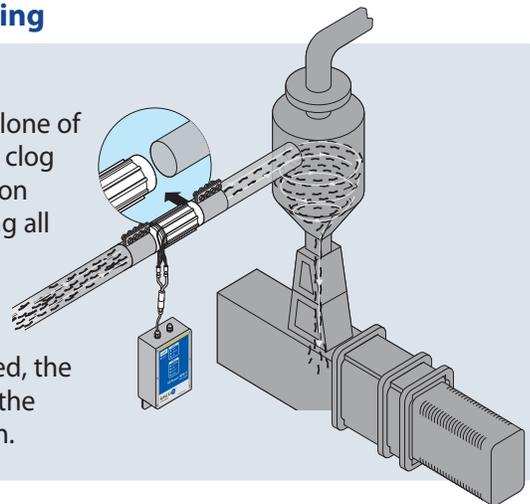


Built-in remote connector for IQ Power BPS-C Power Supplies mounted in inconvenient areas.

Slitter Trim Collection in Converting

Problem: Highly charged slitter trim materials cling to the sides of the cyclone of the trim collection system, forming a clog across the exit duct. The trim collection system must be shut down—affecting all operations producing slitter trim.

Solution: The Conveyostat system neutralizes trim materials prior to entering the cyclone. Once neutralized, the materials flow smoothly throughout the system, eliminating system shutdown.



How is Static Generated?

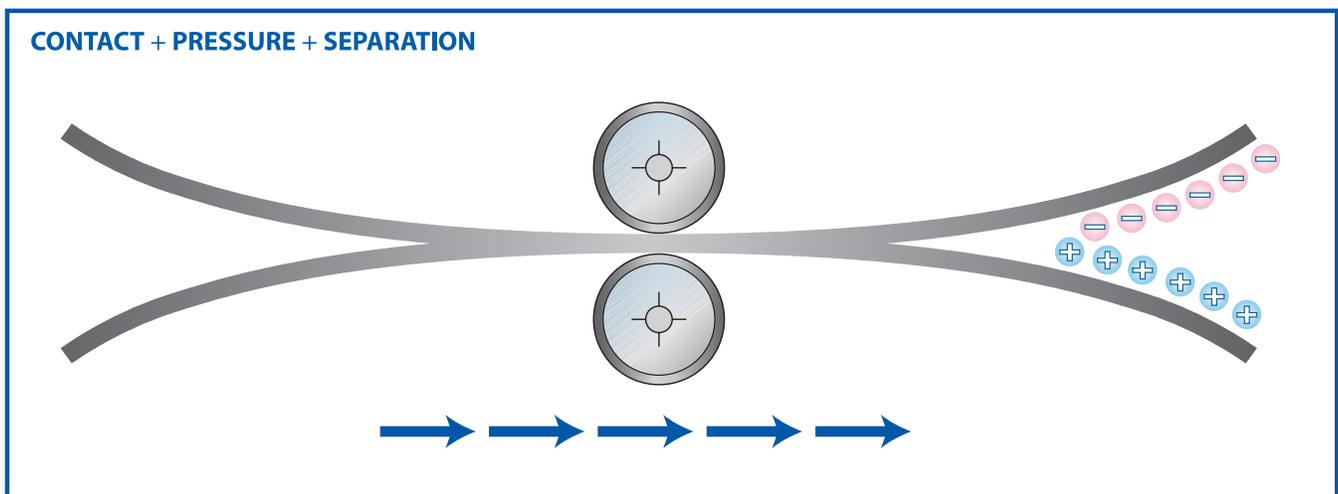
Static electricity is a surface phenomenon and results when two or more surfaces are in intimate contact with each other and then are separated. During contact, surface electrons, which are negative, migrate from one surface to the adjacent surface. When the surfaces separate, the surface that gains the electrons becomes negatively charged, the surface giving them up becomes positively charged.

Many industrial materials are insulators, such as rubber, glass and plastics. Their desirable qualities make them essential to use; however, they are likely to become electrostatically charged during processing.

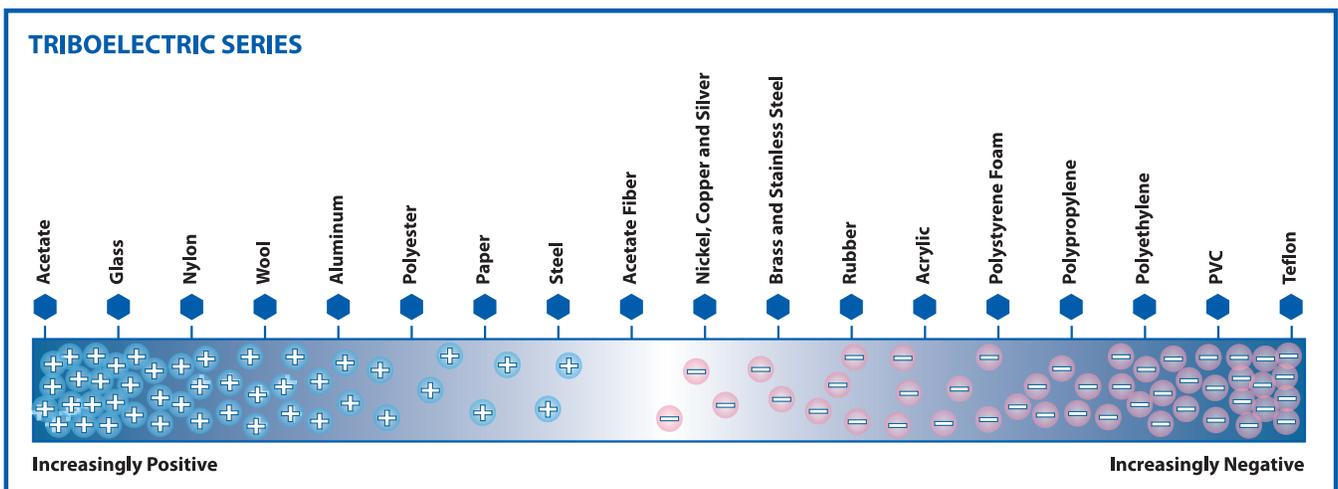
These processes include:

- Peeling laminate
- Unwinding a roll
- Separating surfaces
- Wind-up operations
- Collecting products in bins

Production jams, quality problems, dirt attraction and rejects are all consequences of uncontrolled static.



Friction, pressure and separation are the major causes of static electricity.



The Triboelectric Series chart shows the relative positive or negative charge of various materials.

IQ Power™ HL & IQ Easy™ Modular Sensor

The **IQ Power HL** and **IQ Easy Modular Sensor** Bars work with the IQ Power Control Station to provide the following features:

- In-Process static level measurement
- User-settable alarm thresholds
- Closed-loop feedback
- Data and event logging
- Easy convenient data storage and retrieval via fieldbus or USB

Data storage is valuable as a diagnostic tool for R&D and process improvement. Historical data can be used to investigate a fire/safety incident, customer complaints and quality issues.



FMX-004

Simco-Ion's **FMX-004** measures both positive and negative polarity charges up to ± 30 kV (30,000V) at a distance of 1". Results are simultaneously shown numerically and in bar graph format on the unique multi-colored display that also displays battery charge status. Power on/off, zero adjustment, Ion Balance (MODE) and hold are all push button operation. The hold button allows the display to retain the static charge reading. This is especially useful where the display is difficult to see during measurement.

- Lightweight, compact design
- Range light assures accurate and repeatable measurements
- Automatic power off without activity



Optional Analog Output

Specifications

Power	9V battery
Display Features	Push button POWER, HOLD, ZERO, MODE (Ion Balance operation)
Read Out	Bar graph: Red LCD for positive polarity voltage; Blue LCD for negative; battery capacity & error display
Measurement	Auto Ranging: HI 0 to ± 30 kV; LOW 0 to ± 3 kV; Ion Balance 0 to ± 300 V
Distance	1" $\pm 1/64$ " (25 mm ± 0.5 mm); LEDs guide for correct distance
Dimensions	4-7/8"L x 2-7/8"W x 1"D (123 x 73 x 25 mm)

TensION

Simco-Ion's **TensION** Voltage Detector enables you to check both AC & DC neutralizing and charging equipment. Without making contact with the actual equipment it gives you an easy and safe way to check if a high voltage is present. The tip of the TensION illuminates when a voltage is detected, providing an immediate indication the equipment is energized.

- No contact required
- Safe operation

Specifications

Power	Two AAA size replaceable batteries 1.5V (included)
Temperature	14-122°F
Enclosure	Radilon-S HS(a), BE 170MO IP64
Dimensions	148L x 17 dia. mm (5.8" x 0.7")
Certifications	CE



Charging Bars

Product	Size (in)	Max Voltage (kV)	Emitter (pins/in)	Optimized for Current Mode	Resistor Limited Current	Emitter Material	Available Lengths (in)	Applications
Pinner-T	1.13 x 3.5	60	3.2	●	●	Tungsten	5-146 48 options	Non wovens, Sheet Interleaving, Bindery, Bag making
Pinner-LP	1 x 2	30	2.5	●	●	Hasteloy	5-146 36 options	Bindery, Bag & Pouch making, Static Tacking, Fiberboard Lamination
Pinner	1.13 x 3.5	60	6.3		●	Stainless Steel	5-146 48 options	Roll-to-Roll Changeover, Timed Operation
Tetra	1.31 Round Diameter	30	2.5			Stainless Steel	8.31-143.31 46 options	High Speed Roll-to-Roll Pinning, Commodity Static Pinning (install where inaccessible to operator when energized)
Super Pinner	1.19 x 6.5	50*	88 Pins Total		●	Stainless Steel	14.25	Incline Stacking, Co-Mailing

*30 kV recommended.

Charging Generators

Product	Max Voltage (kV)	Max Current (mA)	Max Total Effective Length (in)*	Remote Inputs	Remote Outputs	Current Control	No. of Outputs
VCM 60	60	2.5	150	Voltage Setpoint, Current Setpoint, HV on/off	Voltage, Current, HV on/off, Limit Alarm	●	4
VCM 30	30	5	300	Voltage Setpoint, Current Setpoint, HV on/off	Voltage, Current, HV on/off, Limit Alarm	●	4
MCM 30	30	1	60	HV on/off, Voltage Setpoint	Fault Relay	●	1
CM 20	20	0.7	40	Voltage Setpoint, on/off	None		4

*Total effective length calculated at max current draw. Lower currents will support longer effective lengths.

Pinner Charging Applicators

	Linear (kV)	Claw (μA)	5-Point (μA)
Charge Pattern	0.5"x2.5" to 1"x5" Elliptical		1"x2" Circular
Ion Output Current @ 0.5" from Ground	20	80	73
	25	100	91
	30	120	110
	50	200	183"
Recommended Generator	VCM 30, MCM 30, CM 20		
Operating Distance	@ 30 kV, 0.5-1.5"		

Static Eliminators and Sensors

Product Group	Product	Control Station Compatible	24V Power Unit	External Power Unit	Balanced ±50V	Air-Assist	Detachable Cable	Operation ²	Recommended Operating Distance ²	Available Lengths	Certifications	Notes
Eliminator Bars	IQ Easy LP	●	●		●		●	<3000 fpm	1-5", Moving Web 8+", Stationary	9.45-85.0" (33 options)	CE, RoHS, IP66, cETLus, Cleanroom Class 1000 (ISO 6)	Extended range available via Control Station for Medical & Electronic Assbly Applications
	IQ Easy Speed	●	●			● ¹	●	<3000 fpm ³	2-9"	10.82-156.8" (63 options)	CE, RoHS, IP66, cETLus	
	IQ Easy Hybrid	●	●				●	<1600 fpm	6-18"	15.12-149.76" (20 options)	CE, RoHS, IP66, cETLus	
	IQ Easy Air-Assist	●	●		●	●	●	<1600 fpm	2-36+"	10.82-95.4" (37 options)	CE, RoHS, IP66, cETLus	Utilizes significantly less air than key competitor
	IQ Easy Modular Sensor	● ⁴	●	Control Station			●	n/a	2-10"	8.02-8.09" (2 options)	ETL, US, Canada	Scalable and calibratable Modes for real-time measurement or CLFB
	IQ Power Speed	●		7 kVDC		● ¹		<3000 fpm ³	2-9"	11.8-155.91" (62 options)	cULus, RoHS	
	IQ Power Hybrid	●		9 kVDC				<1600 fpm	6-18"	28.3-155.91" (19 options)	cULus, RoHS	
	IQ Power Distance	●		12 kVDC				<1000 fpm	12-30"	53.1-152.36" (8 options)	cULus, RoHS	
	IQ Power HL Speed	●		7 kVDC		● ¹		<3000 fpm ³	2-9"	11.8-155.94" (62 options)	CE, HL Class 1 (ISO 6) Div 1 Group D	
	IQ Power HL Hybrid	●		8 kVDC				<1600 fpm	6-18"	28.3-155.94" (19 options)	CE, HL Class 1 (ISO 6) Div 1 Group D	
	IQ Power HL Sensor	● ⁴		Control Station & HL Sensor Interface				n/a	2-10"	10.25"	CSA C22.2#60079-0, CSA C22.2#60079-11, HL Class 1 Div 1 Group D	Scalable and calibratable Modes for real-time measurement or CLFB
	MEB/MEJ			7 kVAC		● ¹		<1200 fpm	1.5-3"	8.5-143.5" (46 options) 8.5-95.5" (30 options)	CE, CSA, cURus, FM, RoHS	
R50			7 kVAC		● ¹		<2500 fpm	2-6"	8.7-156.3" (50 options)	CE, cURus, RoHS		
Blowers	IQ Power Fantom	●		120/230 VAC	Y			600 cfm	20'	24"	cULus, RoHS	HL Class 1, Div 1 Group D option available
	Phoenix			120 VAC				300 cfm	10'	14"	cULus, RoHS	
Nozzles	IQ Power Nozzles	●		7 kVDC		●		1.2-10 scfm	1-18"	n/a	RoHS, IP66	
	HE/HS Nozzles			7 kVAC		●		4.5 scfm	1-8"	n/a	cURus, CSA, FM	
	Ioncell		●		●	●		0.8-3.2 scfm	Inline	n/a	Cleanroom Class 10 (ISO 4), CE, cULus, RoHS2	
Guns	Cobra			5 kVAC		●		9-22 scfm	12-24"	n/a	cULus, CE, CSA, RoHS	
	Cleanflex Easy		●			●		4.5-19.4 scfm	4-24"	n/a	OSHA 29CFR 1910.242(b), CE, RoHS	
	Top Gun			7 kVAC	●	●		2.4-7.4 scfm	2-12"	n/a	cTUVus, CE, RoHS2	
	Conveyostat w/BPS-C	●		5 kVDC				5200 fpm	n/a	24/36/48"	CE, cULus, RoHS	Retrofits available to add monitoring

1. Air-assist can be added with Curtain Transvector.

2. Values based on maximum charge reduction at recommended operating range.

3. For speeds >3000 fpm, contact Simco-Ion.

4. Control Station required for use.

CLFB - Closed-Loop Feedback

fpm - feet per minute

cfm - cubic feet per minute

scfm - standard cubic feet per minute

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