



Critical Environment Bench-top Blower

MODEL 5802i

The Simco-Ion Critical Environment Bench-top Blower Model 5802i provides reliable, fast static charge control for benchtop work areas and small spaces, allowing optimal electrostatics management that minimizes cost and maximizes protection for ESD-sensitive areas. An internal automatic balance correction system ensures ionization continues to reach your target with complete accuracy presenting a significant time and cost savings.

The ionizer can operate with external sensors to maintain precise balance (better than $\pm 1V$) by altering ion output and adapting to environment changes. With the optional sensor and collimator, the Model 5802i delivers precisely balanced and directed ionized air to your target without taking up valuable room in your environment. A greater concentration of emitter points and internal circuitry suited for high humidity applications makes the Model 5802i the standard choice for environments that need quality ESD protection with solid design.

Features






- $\pm 3V$ or better balance ($\pm 1V$ with the optional external feedback system)
- Aluminum or stainless steel chassis
- Options for sensor input, FMS connection, alarms, and management control
- Unique airflow directing collimator option
- Auto-Clean System option

Benefits

- Provides the best corona-based ESD protection for maximizing yields
- Different chassis materials are suited to match specific workplace environments
- Increased control with immediate notification of alarms and the prevention of unauthorized adjustment to power or fan speed
- Significantly improves airflow delivery with faster discharge times from greater distances
- Automates emitter point cleaning, reducing maintenance costs and time



Specifications

Model 5802i Ionizer	
Input Voltage	28 VDC @ 400 mA, from external power supply
Chassis	Aluminum chassis with epoxy-polyester powder coat, or stainless steel
Indicators	Visual green power on LED and red alarm LED with optional audible alarm
Ion Emission	Steady-state DC
Emitter Points	ISO 14644-1 Class 3 standards (Fed. Std. 209E Class 1 equivalent), eight per fan
Airflow	144 cfm (typ)
Discharge	With collimator installed better than 1 sec @ 1 ft, (typ), taken in-line from the center of the fan ($\pm 1000-100V$) ¹ ; without collimator better than 1 sec @ 1 ft (typ), taken in-line from the center of the fan ($\pm 1000-100V$) ¹
Balance	Better than $\pm 1V$ (typ) with external sensor; $\pm 3V$ (typ) without sensor
Cleanroom Class	Meets ISO 14644-1 Class 4 (Fed Std. 209E Class 10)
Audible Noise	High fan speed 62 dB, (typ); low fan speed 51 dB, (typ); measurements taken 12" (30.5 cm) from fan
Mounting	Standard, wall mount, or locking stands
Operating Env.	Temperature 50-90°F (10-32°C); humidity 30-70% RH, non-condensing
Ozone	.008 ppm (typ)
Controls	Power/fan speed slide switch with off/low/high settings (pre-set fixed high speed available as an option), balance adjustment, optional sensor gain adjustment, sensor type selection, and FMS connections
Dimensions	10.5H x 7.6W x 5D in. (26.7H x 19.3W x 12.7D cm)
Weight	Aluminum 3 lb (1.36 kg); stainless steel 5.1 lb (2.3 kg)
Options	External sensor inputs with FMS connection; audible alarm; collimator; internal pre-set fan speed on high; power cord bracket; stainless steel chassis; Auto-Clean System
Warranty	Two year limited warranty
Certifications	RoHS Compliant 
Power Supply	
Input	100-240 VAC, 50/60 Hz, 400 mA
Output	28 VDC, 400 mA
Weight	0.5 lb (8 oz)
Certifications	RoHS Compliant    

1. Tested in accordance with ANSI/ESD STM3.1-2006

$\pm 1V$ Operation

The Model 5802i ionizer's optional external feedback sensor operates with the Novx Process Monitor Series 7000, Novx Single-fan Ionizer Controller Series 3150/3151, Novx Passive Detection System Series 3350 and Novx Active Detection System Series 3360 to detect and automatically correct the balance. With the antenna placed at the target area, feedback is sent to the Model 5802i blower's internal control system. This ensures that your target maintains a $\pm 1V$ or better balance at all times.

Directed Airflow

The optional collimator fits over the fanstack of the blower and directs ionized air straight to the target. This means that the blower can be placed further away from the target with continued excellent discharge times and reach. This faster, directed airflow method significantly improves discharge times by removing common ion disbursement and recombination problems.



Adaptable Options

- An internally pre-set fan speed on high, ensuring uninterrupted delivery of ionization in critical work areas.
- An audible alarm that operates in addition to the visible red LED on the blower to indicate operational failures including a stopped fan or loss of ionization.
- The Auto-Clean System, which reduces maintenance periods by sweeping the emitter points when the blower is turned off and on, allowing the blower to continually perform at optimum ion output and balance.

Ordering Information

91-5802i-8C-PxxR	Powder coated white aluminum blower
-PR	Fan speed fixed high; $\pm 3V$ balance
-PX	Off/low/high external 3-way fan speed control; $\pm 3V$ balance
-PH-FMS/SSR	Fan speed fixed high; $\pm 1V$ balance
-PX-FMS/SSR	Off/low/high fan speed control; $\pm 1V$ balance
91-5802iS-8C-PxxR	Stainless steel blower
-PR	Fan speed fixed high; $\pm 3V$ balance
-PX	Off/low/high external 3-way fan speed control; $\pm 3V$ balance
-PH-FMS/SSR	Fan speed fixed high; $\pm 1V$ balance
-PX-FMS/SSR	Off/low/high fan speed control; $\pm 1V$ balance
99-5802i-AALARM	Audible alarm
99-8500i-PNFFAN	Optional Auto-Clean System
CLMT	Collimator
FMS/SS	FMS Output/Sensor Input
FMS/SS.CLMT	FMS Output/Sensor input with Collimator

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