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Ionization for Electronics Manufacture

PC2 Benchtop Ionizing Air Blower

The Simco PC2 is a state of the art bench top ionizer incorporating micro-processor technology and the latest features to produce superior performance in protecting the most sensitive ESD components in critical applications.

Features:
- ► **Universal voltage input**
- ► **Self balancing to +/-3V**
- ► **Integrated emitter point cleaner (manual or auto cleaning)**
- ► **LED status/alarm lights**
- ► **Replaceable emitters**
- ► **Optional remote sensor**

Benefits:
- ► **Recognizes line voltages (100V – 240V)**
- ► **ESD protection of most sensitive components**
- ► **Fast, easy maintenance**
- ► **LED Indicators:**
  - • *Power*
  - • *System Fault*
  - • *Stalled Fan*
  - • *Remote Sensor*
  - • *Ion Output*
  - • *Ion Balance*
  - • *Maintenance*
- ► **Optional closed loop feedback Sensor enables auto calibration capability. Maintains < +/-1 volt balance @ target.**

Using SSDC corona ion technology, the PC2 utilizes microprocessor control to achieve superior ion balance and precision control, then monitors critical ionizer functions to ensure consistent performance is maintained. The microprocessor controls the ion balance via an internal sensor to +/-3 volts and offers the option of connecting to a remote sensor which maintains ion balance to +/-1 volt at the target location. The optional remote sensor allows for quick connect "automatic calibration" of the PC2.

LED status indicators on the front of the PC2 provide monitoring of the following critical functions: Power, Ion Output, Ion Balance, System Fault, Stalled Fan, and when Emitter Service is required before the emitter condition affects ion output.

Additional features include: A Universal input voltage (100 – 240V), an Integrated manual or optional fully programable auto Emitter Point Cleaner for easy maintenance, a Remote Alarm Contact for remote monitoring, and a RS-485 Data Port for communication & data acquisition.

SPECIFICATIONS:

PC2 Operating Specs

Ion Balance (offset voltage): 0+/-3 V (nominal)

Ion Output (discharge time):

Distance	12 in. (305 mm)	24 in. (610 mm)	36 in. (915 mm)	48 in. (1220mm)
Fan-High	1.5 Sec.	3.0 Sec.	5.0 Sec.	7.5 Sec.
Fan-Low	2.0 Sec.	3.5 Sec.	6.0 Sec.	9.0 Sec.

Offset voltage and discharge time determined as per ANSI/ESD STM3.1 using 6"x6", 20 pF plate (Charged Plate Monitor). Discharge times are in seconds from 1000 volts to 100 volts.

Input Power: 24 VDC, 0.35A, 8 W

Power Supply: Universal 100-240 Vac input (IEC320) / 24 Vdc, 0.75A output

Operating Temperature: 32˚F (0˚C) - 122˚F (50˚C)

Humidity Range: 20%RH – 95%RH (non-condensing)

Airflow Volume: Fan - High:100 CFM (2.8 m3/min)
Fan – Low: 80 CFM (2.3 m3/min)

Audible Noise: 58 dB(A) at 24 in. (610mm)
58 dB(A) at 39 in. (1m)
High fan speed, measured perpendicular to air outlet.

ON/OFF: Switch on rear panel.

Fan Speed: Variable, recessed adjustment on rear panel.

Indicators: Balance: LED bar graph, Power, Remote Sensor, System Fault, Fan Stalled, Service Emitters: LED, all front panel.

Connectors: 8-position, 8-contact (8P8C) RJ-45 Remote Sensor front panel
6-position, 4-contact (6P4C) RJ-11 Alarm Out rear panel
6-position, 4-contact (6P6C) RJ-12 RS-485 Communication rear

Communications: RS-485

Alarm Out: Fault/Service remote indication provided by an opto-isolated transistor (Lite-On LTV-355T) that is toggled during fault/service alarm.

Alarm Out Maximum Ratings:
Veco (collector emitter voltage)35 VDC max
Veco (emitter to collector voltage)6 VDC max
Ic (collector current) 50 mA max

Mechanical Specification

Emitter Material: Machined Titanium, replaceable

Emitter Cleaner: Manual (knob actuated), nylon brush
Optional automated cleaning, programmable cleaning frequency from 1-14 day, 28 days and auto cleaning on power up

Optional Remote Sensor:
- Closed loop feedback < 1 volt balance
- LED Status indicators
- Auto Calibration Function

Enclosure Material: Reinforced polycarbonate, color: white

Enclosure Dimensions: 6.0" W x 7.8" H x 3.5" D (150mm W x 200mm H x 90mm D)

Unit Weight: 3 lb (1.3 kg)

Stand Material: Stainless Steel

Optional Air Filter: 30PPI Open Cell Polyurethan

Part Numbers:

Description	Part # Manual Point Cleaning	Part # Auto Point Cleaning
PC2 North America 120V power supply	4012014	4012245
PC2 Continental Europe 230V power supply	4012015	4012015
PC2 United Kingdom 230V power supply	4012016	4012249
PC2 no power supply, (no AC adapter)	4011962	4012244
Optional Remote Sensor	4012223	
Air Filter Retainer	4530525	
Air Filter	4470415	

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