

*Enhanced*

# Model 3810E

CoreStat® Self-Balanced Air Ionizing Blower



## FEATURES

- CoreStat® Self-Balanced Technology
- Steady-State DC Ion Emission
- Class 0 & Versatile Application
- Ion Balance Alarm
- Output Monitoring for Balance and Failures
- Facility Monitoring System(FMS) Interface
- Auto-Cleaning Brush

## BENEFITS

- No Calibration Required
- Ionizer Status Monitoring
- Auto-Stop Safety Function
- No Transient Noise Free
- Audio & Visual Alarms
- Easy Cleaning and Replacement of Emitter Points

## APPLICATIONS

Tribocharging is a typical ESD source and induced field from insulators must be controlled in EPA (ESD protected area). Process required insulators are commonly used in many places and should be neutralize by ionization systems.


CoreStat® self-balanced technology, Model 3810E is designed as class 0 and versatile applications for semiconductor back-end, printed circuit board assembly and general electronics applications. Model 3810E ionizing blower does not required regular based calibration and intrinsically maintains low offset voltage within a spec.

Facility Monitoring System (FMS) interface will give real time ionizer status monitoring. Visual (LED) and audible (buzzer) alarms operates when HV power fail and out of balance status. Built-in auto-cleaning brush will reduce significant maintenance resources.

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# Model 3810E CoreStat® Self-Balanced Air Ionizing Blower

## Specifications

Input Voltage	24 VDC, 10.6W Max
Ion Emission	Steady-state DC Technology
Ion Balance	< ±5 V
Discharge Time	±1000 V to ±100V less than 1 sec (30cm) ±1000 V to ±100V less than 3 sec (60cm)
Air Flow	140 CFM
Alarm	Visual & Audio alarm operates when ionizer can not maintain balance limit and power failures.
Monitoring	FMS Interface
Operating Environment	Temperature: 15 - 35°C Humidity: 35 - 75 % RH
Material	Enclosure & Filter Cover: ABS plastic Bracket: Aluminum
Dimensions (mm)	148W x 185H x 77D (without bracket) 188W x 205H x 77D (with bracket)
Weight	1kg (with bracket)
Warranty	2 year limited warranty
Certification	



- LED Alarm for Balance & HV Power Failure
- Auto-Stop & Auto-Cleaning Brush
- Easy Access for Manual Cleaning
- Facility Monitoring System Interface

## Selection

Model 3810E	Built-in Auto-Cleaning Brush
Model 3810	Without Auto-Cleaning Brush & Button

## Related Products

Model 5360EP	Tungsten (99.99%) Emitter
Model 5380GF	Rear Panel Filter Grille
Model 5380AC	Auto-Cleaning Brush
Model 5808	Integrated Monitoring & Controlling System (Up to 8 units)
Model 5820	Integrated Monitoring & Controlling System (Up to 20 units)

Status	Visual	Audio
Normal Operation	GREEN	Inactivate
HV Power Fail	RED	Continuous Sound
Balance Fail	RED	Beeping Sound

## Facility Monitoring System Output Signals

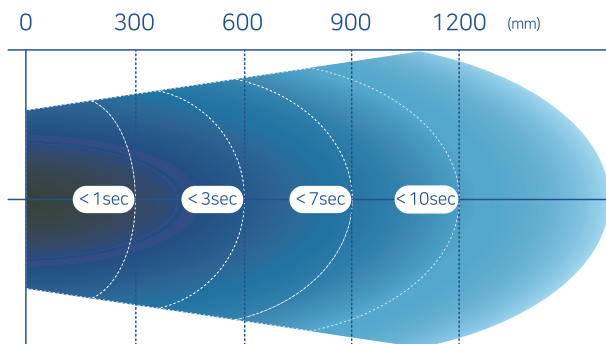
Condition	Pin 2 / 4	Pin 6 / 8	Pin 7
Normal	Open	Open	Low
HV Power alarm	Closed	Closed	High
Balance alarm	Closed	Closed	Low
Port alarm (with Model 5820)	Open	Open	Low



Model 5808, 5820 Ionizer Monitoring System

- Balance & HV Failure Alarm
- Port Detection
- 24 VDC Distribution Up to 20 units
- All 20 Ionizers Auto-Cleaning at Once

## Discharge Time



Discharge time and balance measured according to ANSI/ESD STM3.1 using a Charge Plate Monitor (CPM)

## Size & Dimensions (mm)

