

*Enhanced*

# Model 3810F **NEW**

## CoreStat® Self-Balanced Air Ionizing Blower



### FEATURES

- CoreStat® Self-Balanced Technology
- Steady-State DC Ion Emission
- Class 0 Application
- One-Touch Auto-Cleaning
- RJ-45 Monitoring Interface

### BENEFITS

- No Calibration Required
- Ionizer Status Monitoring
- Auto-Stop for Safety
- Transient Noise Free
- Emitter Point Replaceable

### APPLICATIONS

Tribocharging is a typical ESD source and induction field from insulators must be controlled in ESD protected area (EPA). Process required insulators are one of root cause of CDM ESD device damage and should be maintain lowest voltage difference by low offset ionizers.

CoreStat® self-balanced technology, Model 3810F is designed as Class 0 device handling applications for semiconductor back-end process, printed circuit board assembly and high performance computing (HPC) applications. Model 3810F ionizing blower does not required regular based calibration and it intrinsically maintains very low offset voltage.

Facility Monitoring System (FMS) interface has changed to RJ-45 ethernet terminal and this will save resources to connection. This change allows plug-and-play through 24V DC supplies through this wiring. Visual (LED) and audible alarms operates when HV power failure and out of balance status. One-Touch auto-cleaning brush will reduce significant maintenance resources.

# Enhanced Model 3810F CoreStat® Self-Balanced Air Ionizing Blower

## Specifications

Input Voltage	24 VDC, 10.6 W Max
Ion Emission	Steady-state DC Technology
Ion Balance	< ±5 V
Discharge Time	±1000 V to ±100 V less than 1 sec (30cm) ±1000 V to ±100 V 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
Compatibility	ISO 14644-1 Class 4 Cleanroom Compatible
Certification	



- One-Touch Auto-Cleaning
- LED Alarms for Offset & HV Failure
- Auto-Stop for Personal Safety
- RJ-45 Facility Monitoring

## Selection

<b>Model 3810F</b>	Built-in Auto-Cleaning Brush
<b>Model 3810</b>	Without Auto-Cleaning Brush & Button

## Related Products

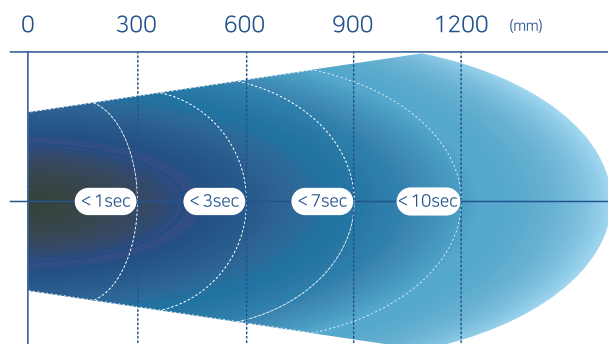
<b>Model 5360EP</b>	Tungsten (99.99%) Emitter
<b>Model 5380GF</b>	Rear Panel Filter Grille
<b>Model 5380AC</b>	Auto-Cleaning Brush
<b>Model 5820</b>	Integrated Monitoring & Controlling System (Up to 20 units)

## Facility Monitoring System Output Signals

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

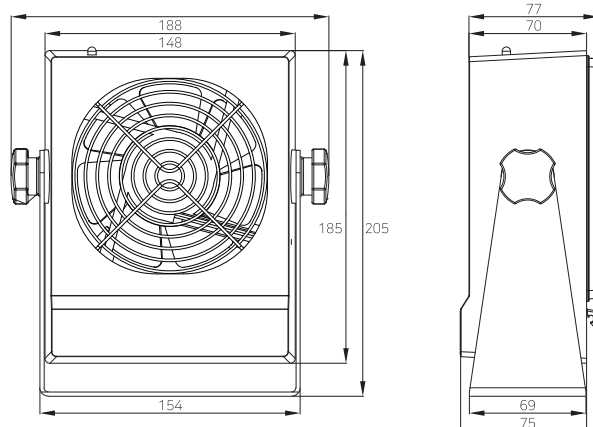
Condition	Pin 1 / 3	Pin 5 / 7	Pin 2
Normal	Open	Open	High
HV Power alarm	Closed	Open	High
Balance alarm	Open	Closed	High

## Discharge Time



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

## Size & Dimensions (mm)



## Model 5820 Ionizer Monitoring System

- Ion Balance Status Alarm
- HV Power Failure Alarm
- 24V DC Power Distribution
- Auto-Cleaning at Once for all connected ionizers