

# Model 310S

CoreStat® Self-Balanced Air Ionizing Blower



## FEATURES

- CoreStat® Self-Balanced Technology
- Steady-State DC Ion Emission
- Versatile Application
- Ion Balance Alarm
- Output Monitoring for Balance and Failures
- RJ-45 FMS Interface

## BENEFITS

- No Calibration Required
- Ionizer Status Monitoring
- 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 310S is designed as versatile applications for semiconductor back-end, printed circuit board assembly and general electronics applications.

Model 310S ionizing blower does not required regular based calibration and intrinsically maintains low offset voltage within a spec.

The New RJ-45 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.

# Model 310S CoreStat® Self-Balanced Air Ionizing Blower

## Specifications

|                       |   |
|-----------------------|---|
| Input Voltage         | 24 VDC, 7.2 W Max   |
| Ion Emission          | Steady-state DC Technology  |
| Ion Balance           | < ±20 V   |
| Discharge Time        | ±1000 V to ±100 V less than 2 sec (30cm)<br>±1000 V to ±100 V less than 5 sec (60cm)          |
| Air Flow              | 100 CFM   |
| Alarm                 | Visual & Audio alarm operates when ionizer can not maintain balance limit and power failures. |
| Monitoring            | RJ-45 terminal Interface  |
| Operating Environment | Temperature: 15 - 35°C<br>Humidity: 35 - 75 % RH  |
| Material              | Enclosure & Filter Cover: ABS plastic<br>Bracket: Aluminum                                    |
| Dimensions (mm)       | 125W x 135H x 70D (without bracket)<br>152W x 155H x 70D (with bracket)                       |
| Weight                | 580g (with bracket)   |
| Warranty              | 2 year limited warranty   |
| Certification         | CE RoHS   |



- Ion Balance Alarm
- Easy Access for Manual Cleaning
- New RJ-45 Facility Monitoring System Interface

## Selection

|             |  |
|-------------|--|
| Model 310SE | One Touch Auto-Cleaning Button<br>Built-in Auto-Cleaning Brush |
| Model 310S  | Without Auto-Cleaning Brush & Button                           |
| Model 310   | Economic Version Without Options                               |

## 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 2 / 4 | Pin 6 / 8 | Pin 7 |
|---------------------------------|-----------|-----------|-------|
| Normal                          | Open      | Open      | High  |
| HV Power alarm                  | Open      | Closed    | High  |
| Balance alarm                   | Closed    | Open      | High  |
| Port alarm<br>(with Model 5820) | Open      | Open      | Low   |

## Related Products

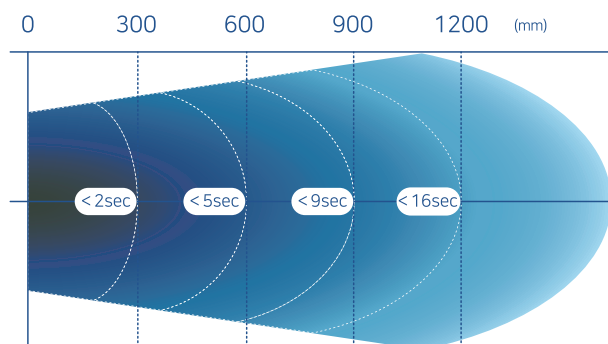
|              |   |
|--------------|---|
| Model 5310EP | Tungsten (99.99%) Emitter                                   |
| Model 5310GF | Rear Panel Filter Grille                                    |
| Model 5310AC | Auto-Cleaning Brush   |
| Model 5820   | Integrated Monitoring & Controlling System (Up to 20 units) |



Model 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)

