Model 310S
CoreStat® Self-Balanced Air Ionizing Blower

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

**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 operate when HV power fail and out of balance status.

**BENEFITS**
- No Calibration Required
- Ionizer Status Monitoring
- No Transient Noise Free
- Audio & Visual Alarms
- Easy Cleaning and Replacement of Emitter Points
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), ±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℃, Humidity: 35 - 75 % RH
- Material: Enclosure & Filter Cover: ABS plastic, Bracket: Aluminum
- Dimensions (mm): 125W x 135H x 700 (without bracket), 152W x 155H x 170D (with bracket)
- Weight: 580g (with bracket)
- Warranty: 2 year limited warranty
- Certification: CE, RoHS

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

Facility Monitoring System Output Signals

<table>
<thead>
<tr>
<th>Condition</th>
<th>Pin 2 / 4</th>
<th>Pin 6 / 8</th>
<th>Pin 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Open</td>
<td>Open</td>
<td>Low</td>
</tr>
<tr>
<td>HV Power alarm</td>
<td>Closed</td>
<td>Closed</td>
<td>High</td>
</tr>
<tr>
<td>Balance alarm</td>
<td>Closed</td>
<td>Closed</td>
<td>Low</td>
</tr>
<tr>
<td>Port alarm (with Model 5820)</td>
<td>Open</td>
<td>Open</td>
<td>Low</td>
</tr>
</tbody>
</table>

Discharge Time

<table>
<thead>
<tr>
<th>0</th>
<th>300</th>
<th>600</th>
<th>900</th>
<th>1200 (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2sec</td>
<td>&lt; 5sec</td>
<td>&lt; 9sec</td>
<td>&lt; 16sec</td>
<td></td>
</tr>
</tbody>
</table>

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

Selection
- Model 310SE: One Touch Auto-Cleaning Button, Built-in Auto-Cleaning Brush
- Model 310S: Without Auto-Cleaning Brush & Button
- Model 310: Economic Version Without Options

Related Products
- Model 5310EP: Tungsten (99.99%) Emitter
- Model 5310GF: Rear Panel Filter Grille
- Model 5808: Integrated Monitoring & Controlling System (Up to 8 units)
- Model 5820: Integrated Monitoring & Controlling System (Up to 20 units)

Model 5808, 5820 Ionizer Monitoring System
- Balance & HV Power Failure Alarm
- Port Detection
- 24 VDC Distribution Up to 20 units
- All 20 Ionizers Auto-Cleaning at Once

Size & Dimensions (mm)