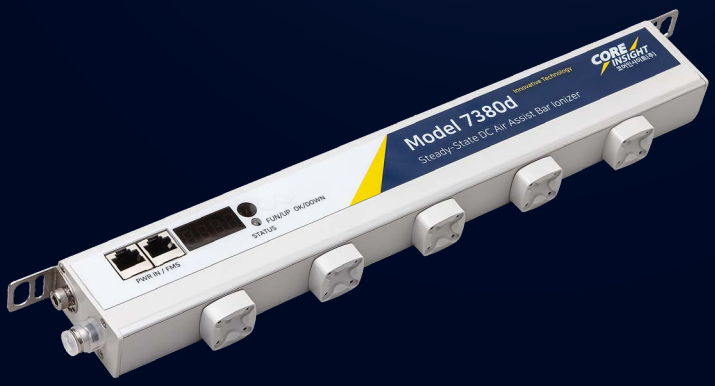
CORE INSIGHT
코어인사이트(주)

THE NEW INNOVATION DESIGN

INTELLECTUAL Patent Granted PROPERTY

Model 7380d

INNOVATIVE AirStat® Steady-State DC Bar Ionizer



FEATURES

- Steady-State DC Ion Emission
- Class 0 ESD Control Application
- Output Voltage Adjustable
- Very Low Offset Voltage
- Audio & Visual LED Alarms
- FMS Monitoring Interface

BENEFITS

- Ion Balance Alarms
- HV Power Failure Alarms
- No Swing Voltage
- No Induction Field

* IR Remote Controller (Optional)
* Single Crystal Silicon Emitter Point
* Tungsten 99.99% Emitter Point
* 1/4 Turn Easy Emitter Point Replacement

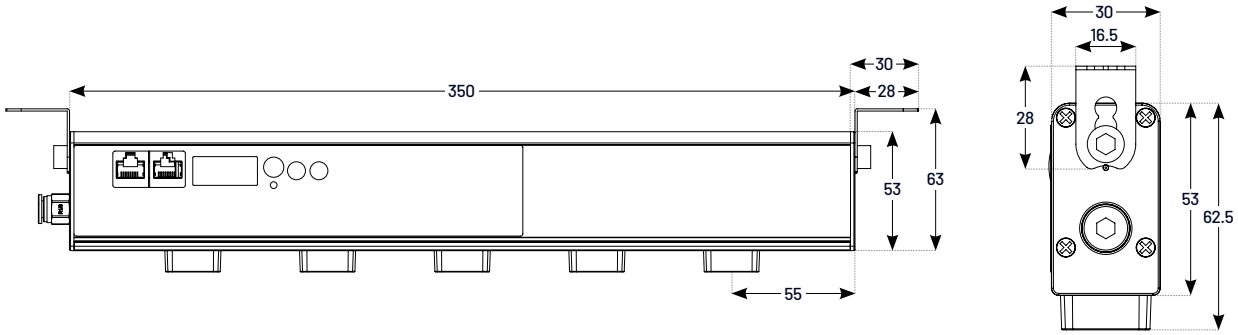
APPLICATIONS

Model 7380d AirStat® Steady-State DC Bar Ionizer is designed to provide ionization for the ESD senstive device handling areas such as semiconductor back-end, surface mount process and telecommunication component handling applications. QuadPoint® nozzle design does not generate induction field by AC swing voltage source which could lead an ESD damage on device during processes. Model 7380d AirStat® Steady-State DC Bar Ionizer is designed for versatile ESD control applications, especially suited for space limited environment such as inside of automated handling equipment (AHE) and manual assembly areas. AirStat® Steady-State DC technology is adjustable linear output voltage and maintain offset balance at very low level for ESD safe handling. With LED display and output audio alarms, users can identify ion balance and HV power failure status.

SPECIFICATIONS

Input Voltage	24 VAC, 1.4 W Max	**Alarm**	Visual & Audio alarm operates voltage feedback monitoring, cleaning cycle, power, sync and polling failures
Output Voltage	±3.5 kV DC, 10 V resolution adjustment	**Display**	4 digit LED display
Ion Emission	Steady-State DC Technology	**Operating Environment**	Temperature: 15 - 35 °C, nominal Humidity: 20 - 60% RH, non-condensing
Ion Balance	Less than ± 5 V	**Material**	Enclosure: ABS plastic / Bracket: Stainless Steel
Decay Time	Less than 2 second at 300mm	**Dimensions**	63 H x 30 D x 350 L mm (350, 590, 770, 860 L)
Output Control	IR Remote Controller	**Warranty**	1 year limited warranty
Emitter Point	Single Crystal Silicon and Tungsten 99.99%	**Certification**	CE RoHS UL LISTED

SIZE & DIMENSIONS (mm)



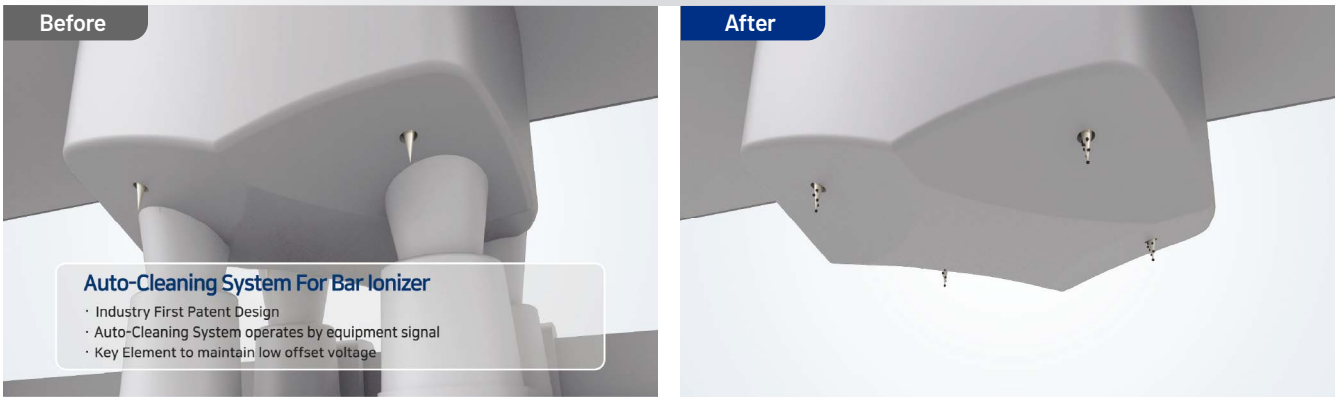
FMS OUTPUT SIGNAL

PIN No	Description	PIN No	Description
Pin 1	24 VDC Input	Pin 5	GND
Pin 2	N/A	Pin 6	HVP Alarm
Pin 3	DC Return	Pin 7	Port Detect Alarm
Pin 4	N/A	Pin 8	HVP Alarm COM

RELATED PRODUCTS

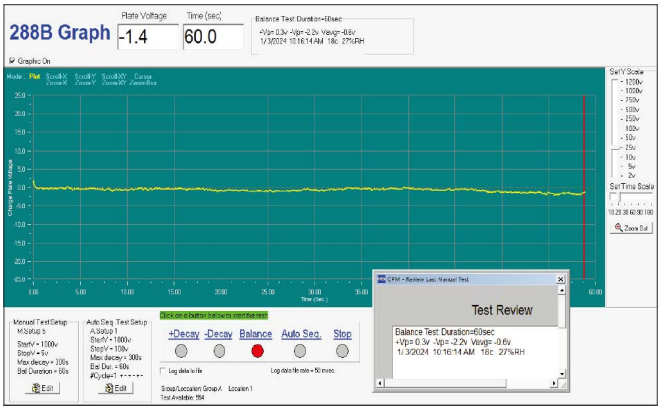
Model 5780ES	Single Crystal Silicon
Model 5780EP	Tungsten

QUADPOINT® NOZZLE DESIGN



ION BALANCE TEST RESULTS AC Switching Voltage can cause of ESD Damage by Induction

- ANSI/ESD STM3.1 & S20.20 - Offset Voltage means for DC based ionizer
- Test Equipment - Model 288B CPM by Monroe Electronics



No Swing Voltage from Steady-State DC Ionizer

Induction Field Swing Voltage from Pulsed AC Ionizer
Peak-to-Peak value: +305 V to - 393 V

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Model 7380d *INNOVATIVE* AirStat® Steady-State DC Bar Ionizer

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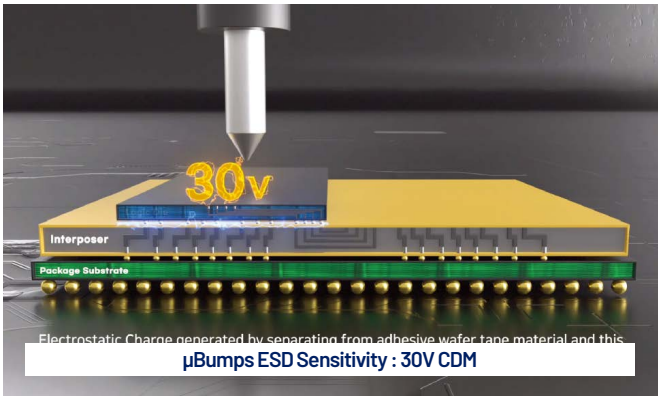
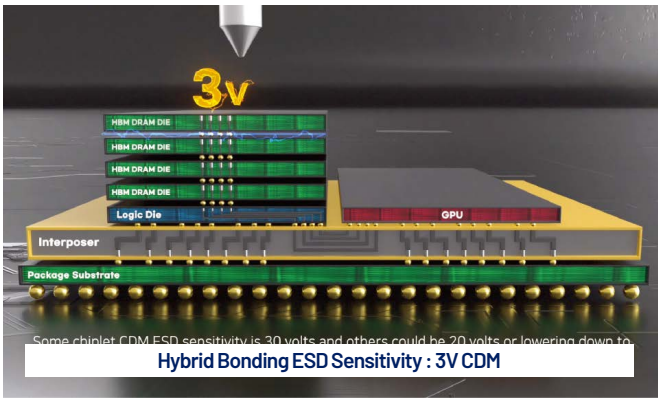
Sensitivity Level of Advanced Package Device

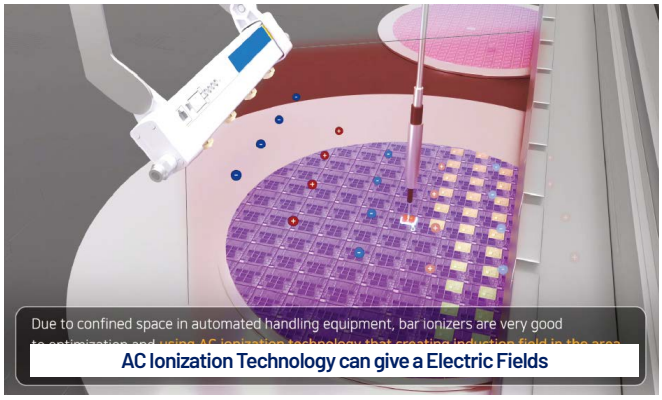


μBumps ESD Sensitivity : 30V CDM



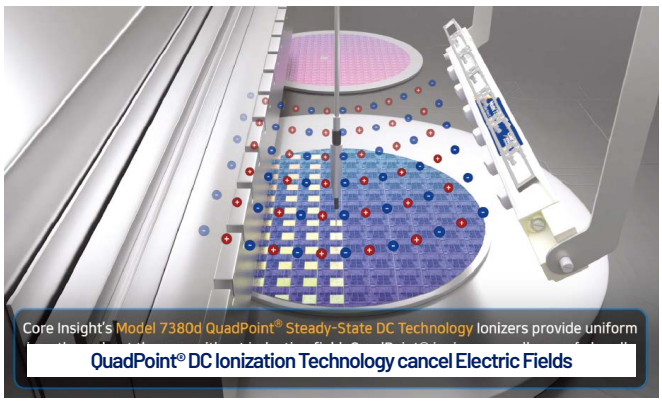
Hybrid Bonding ESD Sensitivity : 3V CDM

QuadPoint® DC Technology vs AC Technologies



Due to confined space in automated handling equipment, bar ionizers are very good

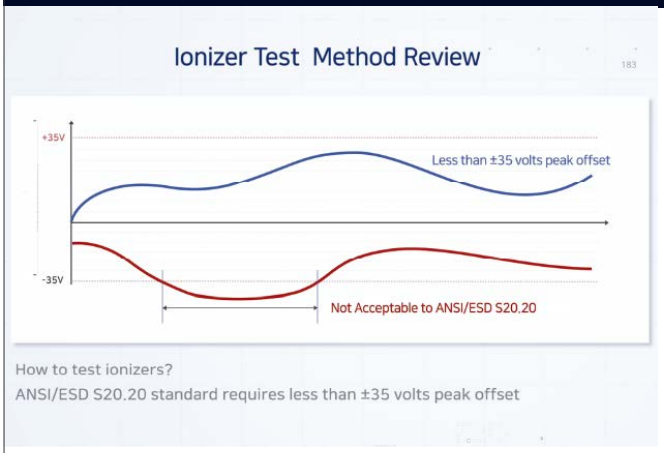
AC Ionization Technology can give a Electric Fields

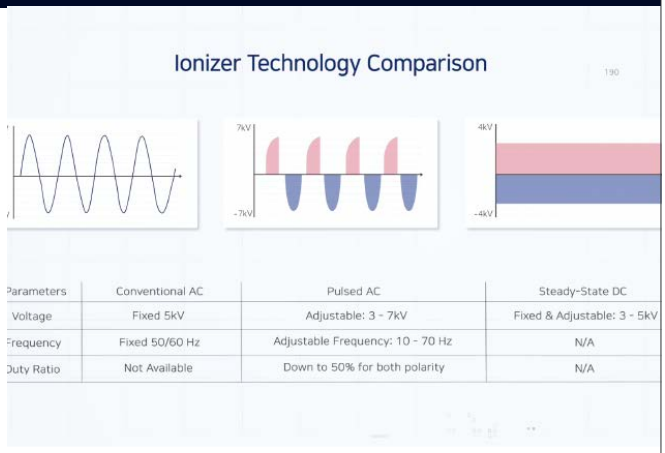


Core Insight's Model 7380d QuadPoint® Steady-State DC Technology Ionizers provide uniform

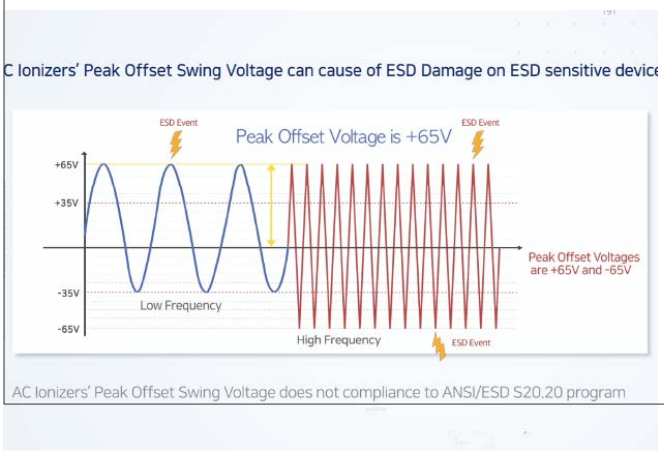
QuadPoint® DC Ionization Technology cancel Electric Fields

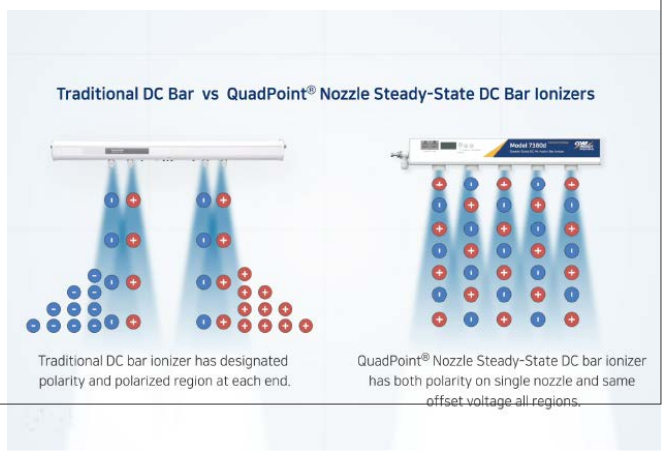
ANSI/ESD STM3.1 and ANSI/ESD S20.20 standard requirements





Parameters	Conventional AC	Pulsed AC	Steady-State DC
Voltage	Fixed 5kV	Adjustable: 3 ~ 7kV	Fixed & Adjustable: 3 ~ 5kV
Frequency	Fixed 50/60 Hz	Adjustable Frequency: 10 ~ 70 Hz	N/A
Duty Ratio	Not Available	Down to 50% for both polarity	N/A





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