

## Optional Accessories



### Remote Controller

High Voltage Output Adjustment  
Output Timing Adjustment  
Duty Cycle Adjustment  
Clean Alarm Level Adjustment  
HV Alarm Level Adjustment

### Replacement Emitter Points



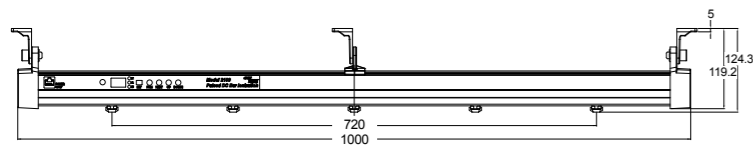
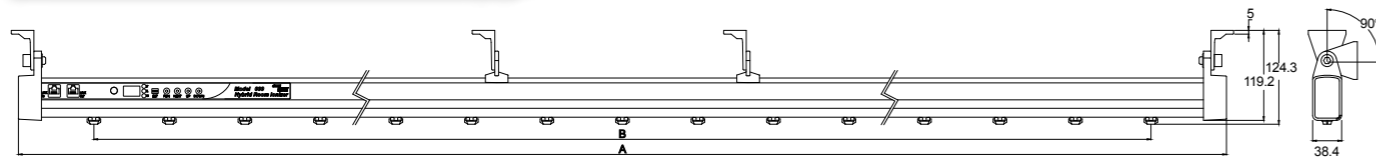
### Power Adapter



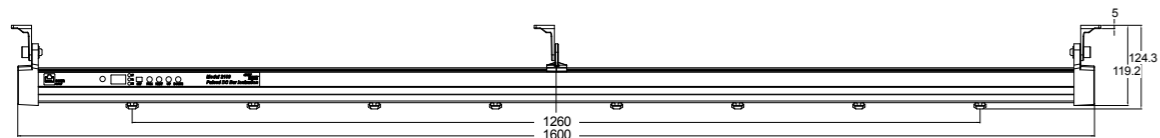
## Specifications

Input Voltage	24V DC, 5.7W Maximum
Output Voltage	14kV pk, 100V Resolution Adjustment
Length	800 - 3000mm, Custom Size Available
Timing	0.1 - 99.9 sec for each polarity 0.1 Sec Resolution Adjustment
Ion Emission	Pulsed DC Technology
Ion Balance	Less than $\pm 50V$ , User Define Adjustment
Emitter Points	Tungsten 99.99%
Display	3 Digit FND
Controls	Output Voltage Adjustment, Output Timing Adjustment, Alarm Setting
Alarms	HV Power Fail, Emitter Clean, LED & Audio
Enclosure	Cleanroom Compatible ABS, Polycarbonate
Dimensions	124 H x 50 D x Variable Length See Below
Operating	Temperature: 15 ~ 35°C / Humidity: 35 ~ 75% RH
Warranty	Limited 1 Year

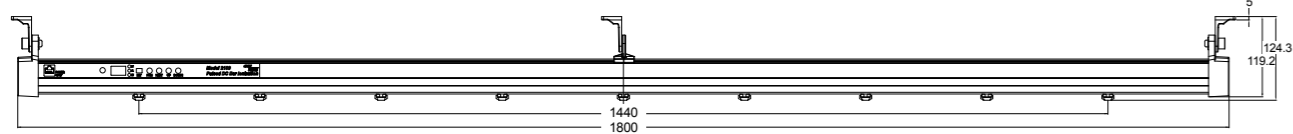
## Product Length and Detail Sizes



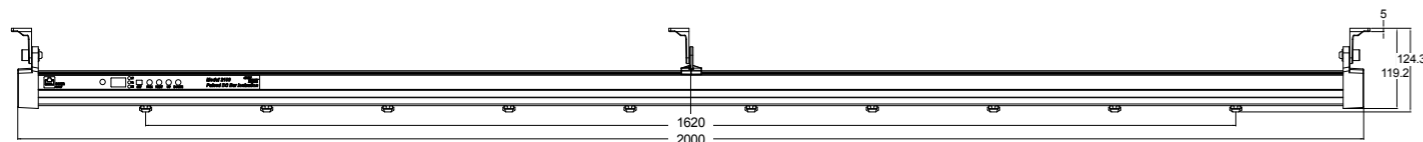
Model2200-1000



Model2200-1600



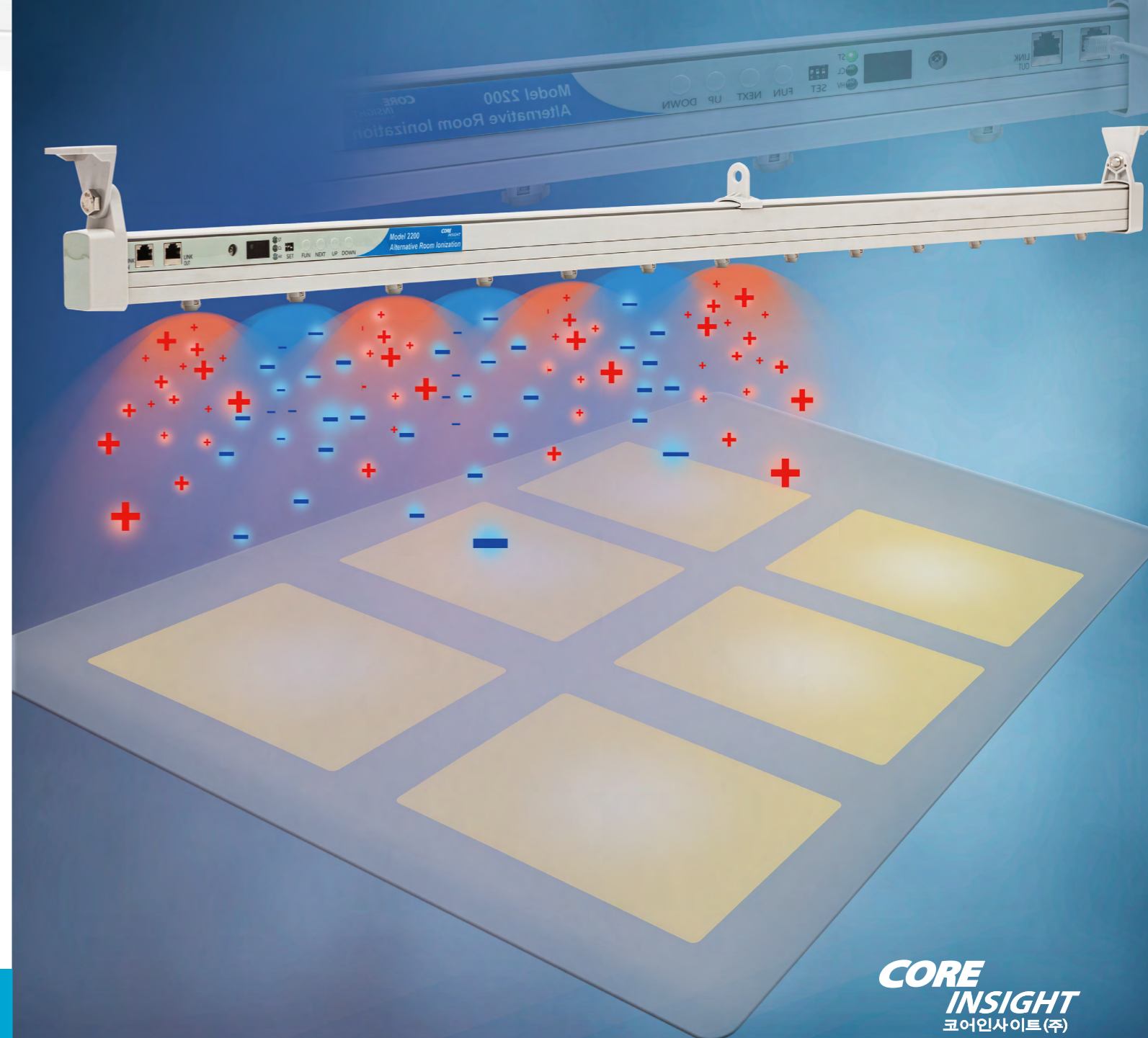
Model2200-1800



Model2200-2000

# Alternative Room Ionization Systems

## Model 2200 Hybrid Room Ionization Systems





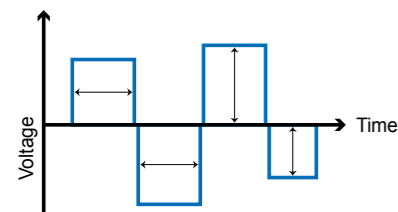
# Model 2200 Hybrid Room Ionization Systems

## Symmetrical Dual Bar Systems

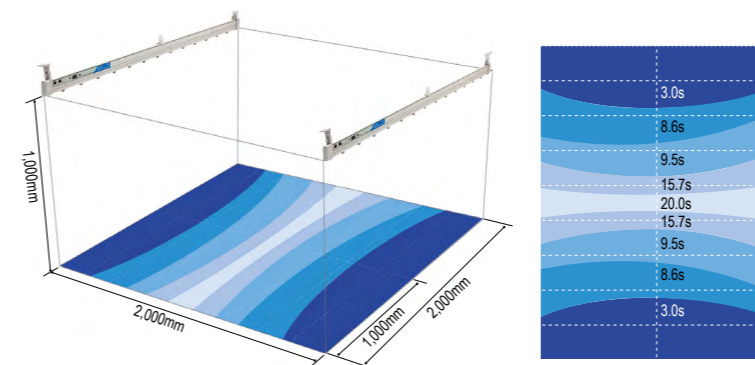
Synchronized Ion Emitting Operation  
Large Space or Room Ionization  
Master & Slave Dual Bar System

## Features

High Ion Current Output for FPD Industry  
Microprocessor Based Digital Platform  
Voltage Adjustment for Both Polarities  
Timing Adjustment for Both Polarities  
Remote Controller Adjustment



Installation Example



Ionizer Test Result by CPM

## Application Notes

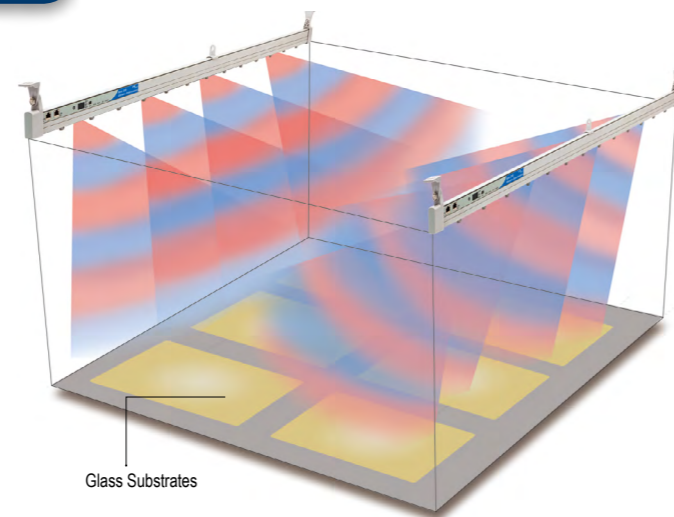
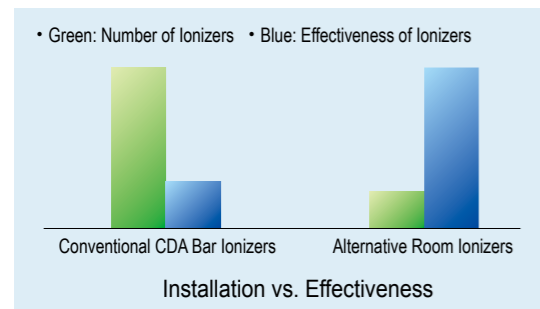
Contamination and ESD issues in FPD are critical issues due to its design changes along with higher definition and fast refresh rates of display panels. FPD's contamination and ESD sensitivity are heavily related with its size and thickness. Glass sizes are getting increasing.

General ESD control methodology do not work properly in FPD environment such as grounding procedure and adopt conductive contact materials. Semiconductor wafers and IC are relatively small and conductive. FPD panels are highly insulative and large capacitances. To neutralize this FPD panels in production, manufacturers requires different level of ionization.

Model 2200 is innovative design for fast and large area neutralization such as Gen. 8 FPD plates or bigger in production. Dual symmetrical ionization system produce extremely large amount of ions through Pulsed DC technology.

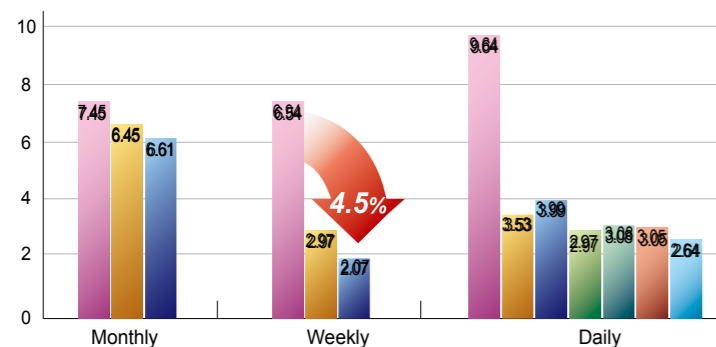
## Advantage of Alternative Room Ionization

Highly Effective to Prevent Particle Attractions and ESD Damage on FPD  
Large Area/Room Neutralization  
Very Low Operation Cost  
No CDA Requirement



## Yield Improvement

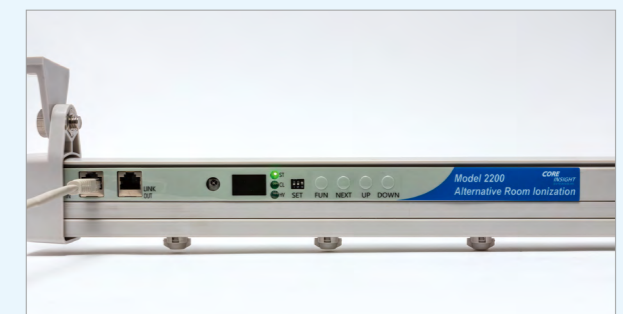
Using with alternative room ionization systems, FPD manufacturing process improves their yield from 6.69% down to 2.03% within two weeks and this improvement constantly maintaining in mass production. Particle contamination and ESD problems are solved by this new technology.



## Emitter Points Replacement



## Normal Operation



## Emitter Points



## Normal Operation

