

# High Frequency Ionization Systems

## Model 4110 Nozzle Ionizer

### FEATURES

- High Frequency Ion Emission
- Facility Monitoring System(FMS) Interface
- Power Failure Alarm
- Compact Size

### BENEFITS

- Multi-Color Visual Alarm
- Audio Alarm
- Emitter Point Easy Clean and Replace
- Connect to Process Equipment
- Versatile Application

### 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.

Model 4110 has designed versatile applications for semiconductor backend, printed circuit board assembly and general electronics applications. Model 4110 Nozzle Ionizer has built-in feedback sensor to detect out of balance in low voltage level.

Output alarm monitoring interface will allow real time ionizer status monitoring and give visual(LED) & audio(buzzer) alarms when HV power fail.

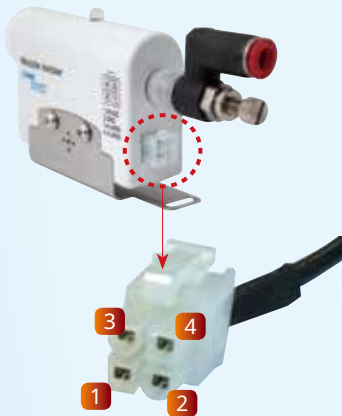


# Model 4110 Nozzle Ionizer

## SPECIFICATIONS (Preliminary)

Input Voltage	24V DC, 2.2W (Maximum)
Ion Emission	High Frequency AC (70kHz)
Balance	Avg. $\leq \pm 10V$ , Max. $\leq \pm 30V$
Discharge	$\pm 1000V$ to $\pm 100V$ less than 1 seconds at 15cm
Emitter Point	Tungsten 99.99%
Alarm Function	Visual (LED), Audio (Buzzer) HV Power Fail (Normal open)
Output Monitoring	FMS Interface
Air Pressure	0.1~0.5 Mpa
Air Inlet	6mm Inlet
Material	Ionizer body : ABS (White) Bracket : SUS
Operating Environment	Temperature : 15~35°C, Humidity : 35~85% RH
Dimension (W×H×D)	134×55.5×25mm With bracket 134×61.1×25mm
Weight	90g (with bracket)
Warranty	1year

## CONNECTOR



DC 24V & Alarm Interface

Pin No.	Description
FMS 1	DC 24V +
FMS 2	DC 24V - (Ground)
FMS 3	HVP Alarm relay output
FMS 4	HVP Relay common

## OPTION

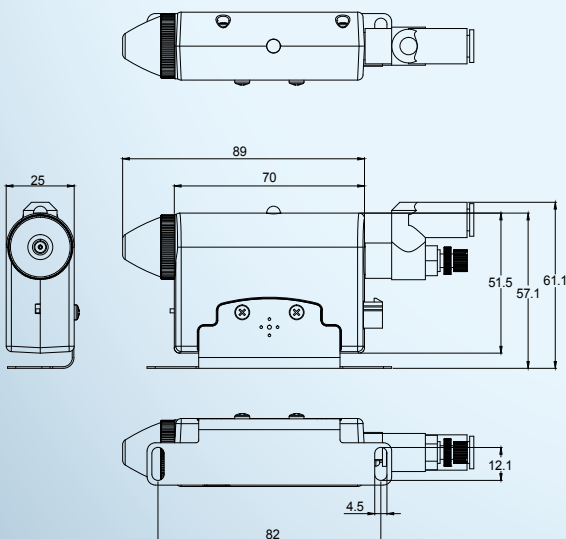
Nozzle Ionizer-Sensor  
Model 4111

Model 4111 is operating air outlet when the IR sensor detect. (ex : Conveyor lines, etc)

### <Model 4111>

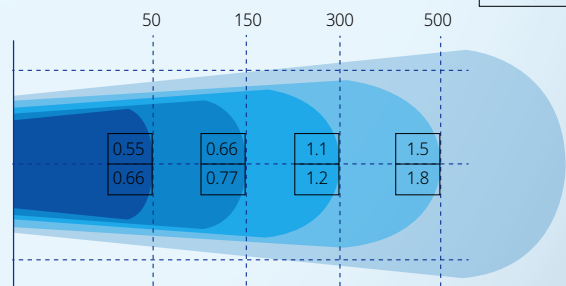


## Sizes & Dimensions (mm)



## Model 4110 Discharge Time

Air Pressure 3bar  
+Decay time(sec)  
- Decay time(sec)



### Accessories

wall mount Adapter

Interface cable

