

# Model 4120

## High Frequency AC Nozzle Ionizer



### FEATURES

- High Frequency AC Technology
- Versatile Application
- Compressed Air On/Off Sensor
- Low Offset Balance
- Alarm for HV Power Fail

### BENEFITS

- No Calibration Required
- Audio & Visual LED Alarms
- Particle Contamination Cleaning
- Automatic Operation by IR Sensor

### APPLICATIONS

Electrostatic force is a typical source of micro particle contamination in printed circuit board handling and general electronics industry. It is very hard to remove particle once they attracted on the charged surface of materials. Charge neutralization is important for remove particles from the surface.

High frequency AC technology based, Model 4120 nozzle ionizer is designed small package for space limited in automated process and general cleaning applications. Strong ionized air force is effective for removing particles attracted objects. Model 4120 nozzle ionizer does not required calibration, but just cleaning emitter points in regular based due to high frequency AC power designed. IR sensor operates compressed air or CDA on/off. Visual (LED) and audible (buzzer) alarms operates when high voltage power supply fail.

# Model 4120 High Frequency AC Nozzle Ionizer

## Specifications

Input Voltage	24 VDC, 4.1 W Max.
Ion Emission	High Frequency AC Technology, 70 kHz
Ion Balance	Average Less than $\pm 10$ V, Maximum Less than $\pm 30$ V
Discharge Time	$\pm 1000$ V to $\pm 100$ V less than 1 sec at 15cm
Emitter Point	Tungsten 99.99%
Alarm	Visual & Audio alarm operates when ionizer power failures.
Air Pressure	0.1 - 0.5 Mpa
Air Inlet	6mm Inlet
IR Detection	Diffusion Reflection
Detection Distance	Less than 1m
Response Time	Less than 1ms
Operation Mode	Light On / Dark On
Operating Environment	Temperature: 15 - 35°C Humidity: 35 - 75 % RH
Material	Enclosure: ABS plastic Nozzle: Teflon
Dimensions (mm)	134W x 56H x 61D
Weight	90g
Warranty	1 year limited warranty
Certification	



- IR Detection Sensor
- Nozzle Only Ionizer and IR Sensor Assembled

## DC Power & FMS Monitoring Outputs

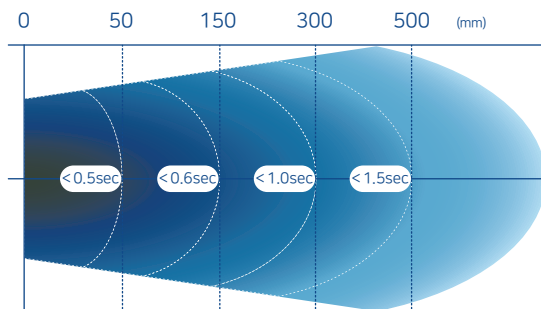
Condition	Pin #1	Pin #2	FMS 3~4
Normal	N/A	N/A	Open
Alarm	N/A	N/A	Closed
Input Power	24V DC	Ground	Closed



## Purchasing Options

Model 4120	Compressed air or CDA On/Off operate by IR sensor
Model 4110	Continuous compressed air or CDA operation
Model 4111	IR Sensor Option for Model 4110
Model 4110U	Urethane Airtube Nozzle Assembly

## Discharge Time



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

## Size & Dimensions (mm)

