

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

 $\begin{tabular}{ll} \textbf{Ion Balance} & Average Less than ± 10 V, Maximum Less than ± 30 V \\ \end{tabular}$

Discharge Time $\pm 1000 \text{ V}$ to $\pm 100 \text{ V}$ 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℃ Humidity: 35 - 75 % RH Material

Material Enclosure: ABS plastic
Nozzle: Teflon

Dimensions (mm) 134W x 56H x 61D

Weight 90

Warranty 1 year limited warranty
Certification







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





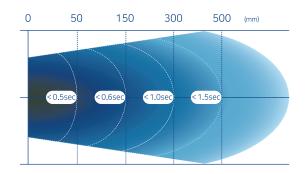
DC Power & FMS Monitoring Outputs

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	Continous compressed air or CDA operation	
Model 4111	IR Sensor Option for Model 4110	
Model 4110U	Uretane 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)

