

Model 4100 Series

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 Removal
- Automatic Operation by IR Sensor

APPLICATIONS

Electrostatic force is a typical source of micro particle contamination in high-tech electronic manufacturing environments such as semiconductor, optical device handling and general electronics industry. It is very hard to remove particles once attracted on the charged surface of materials and charge neutralization is important prior to remove particles on the surface.

Based on high frequency AC technology, the Model 4100 Series nozzle ionizer is designed in a small form-factor for space limited process equipment and applications. Strong ionized air force is effective for removing particles from attracted objects. The Model 4120 controls of On/Off compressed air or CDA usage through a built-in infrared sensor.

The Model 4100 Series ionizer's high-voltage AC power technology features a design that does not require calibration, but just cleaning emitter points on a regular basis due to the high frequency AC power design, making maintenance simple. The alarm with combined LED and audio indicators alerts users to high-voltage power failures.



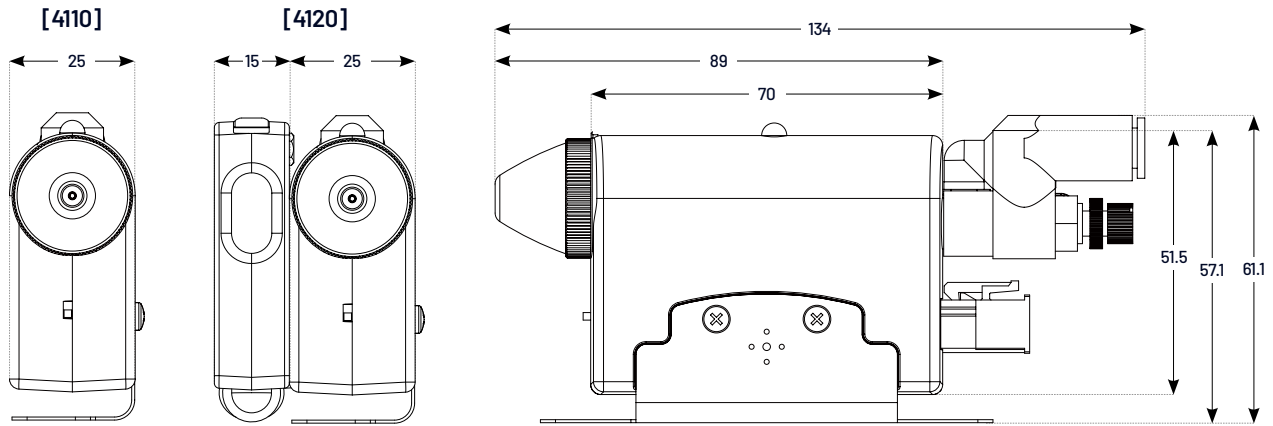
SPECIFICATIONS

Input Voltage	4110 : 24 VDC, 2.2 W Max 4120 : 24 VDC, 4.1 W Max	Air Inlet	6 mm Inlet
Ion Emission	High Frequency AC Technology	Operating Environment	Temperature: 15 ~ 35 °C, nominal Humidity: 35 ~ 75% RH
Ion Balance	Average Less than ± 10 V, Maximum Less than ± 30 V	Material	Enclosure: ABS plastic Nozzle: Teflon
Discharge Time	Less than 1 second at 150 mm	Dimensions	134 W x 56 H x 61 D
Emitter Points	Tungsten 99.99%	Weight	90 g
Alarm	Visual & Audio alarm operates when ionizer power failures	Warranty	1 year limited warranty
Air Pressure	0.1 ~ 0.3 MPa	Certification	CE RoHS LISTED

IR Sensor *only 4120

IR Detection	Diffusion Reflection	Detection Distance	Adjustable in less than 1m maximum distance
Response Time	Less than 1ms	Operation Mode	Black and White selection

SIZE & DIMENSIONS (mm)



DC POWER & FMS MONITORING OUTPUTS

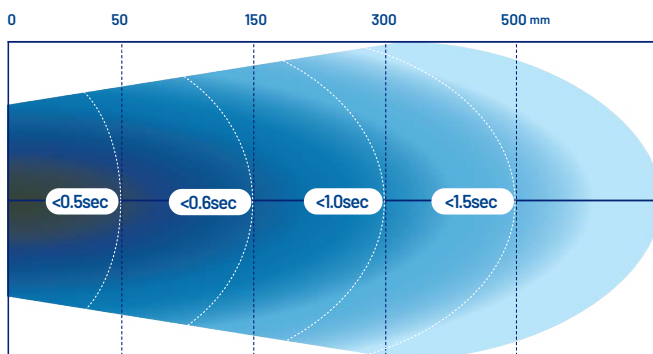
Condition	Pin #1	Pin #2	Pin 3~4
정상 동작	N/A	N/A	Open
알람 상태	N/A	N/A	Closed
입력 전압	24VDC	Ground	Closed

PRODUCT INFORMATION

Model 4110	Continuous compressed air on CDA operation
Model 4120	Compressed air or CDA On/Off operate by IR Sensor
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)

