

Nozzle-type high frequency model

PIEZONIZER

PIEZONIZER ZappII Compact AC Ionizer with an Ultra-small Built-in Piezoelectric Transformer



Power supply, signal cable (standard accessories)



The OZ-S nozzle at the front is an option.

Main Features

- **Highly reliable**
Air joint with increased ozone resistance.
- **Maintains safety**
Newly-designed transformer box stops high voltage output when the emitter needle is being cleaned or changed.
- **Better ozone resistant nozzles**
Wide range of nozzle applications for better ozone resistance.
- **Easy maintenance**
The emitter needle can be easily removed and replaced through the back part of the transformer making for easy cleaning and replacement of the emitter needle.



Replacable Emitter unit

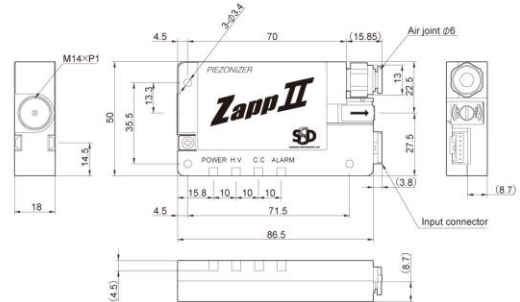
High voltage stop alarm

An alarm warning and two no voltage relays (normal open and normal close) indicate when there is a high voltage stoppage.

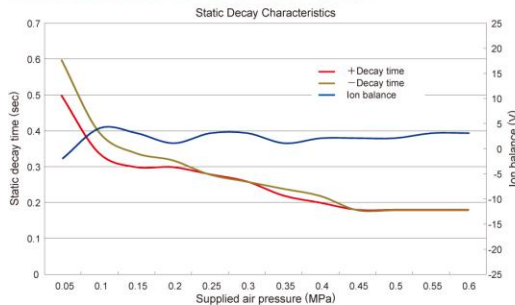
Cleaning check [C.C]

An LED and a normal open no voltage relay warn of abnormal discharges from the emitter needle.

Dimensional Diagrams



Static Decay Characteristics and Ion Balance Characteristics of the Zapp Model



- (Note 1) Using □150mm, 20pF charged plated monitor for measurements.
 (Note 2) Static elimination time equals the decay time $\pm 1000V \rightarrow \pm 100V$.
 (Note 3) Distance is measured 50mm from the plate monitor.
 (Note 4) Using Shishido Electrostatic's standard nozzle OZ-S.

Model	ZappII
Input power supply	DC+24 V $\pm 10\%$
Electric consumption	2.4 VA
Output voltage	High frequency 3000 V
Ion balance	± 15 V or less
Air pressure	*1 Please check with below sheet
Airflow supply	30 l/min to 160 l/min
Ozone density	0.05ppm or less (air pressure input: 0.02 Mpa, distance 300mm)
Guaranteed operating temperature	10 to 40 °C (stored at -10°C to 60°C)
Guaranteed operating humidity	From 75% or less with no condensation (stored at -90% or less with no condensation)
Main unit dimensions	87×18×50mm (W×H×D) not including protruding portion
Weight	72g
Accompanying items	Power supply cable

*1 The available air pressure range is different for each nozzle, please check with below sheet.

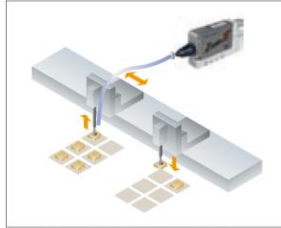
OZ-S	0.05 to 0.60 MPa	OZ-C100 to C500	0.05 to 0.50 MPa
OZ-TT	0.05 to 0.50 MPa	OZ-ST	0.05 to 0.30 MPa
OZ-100B to 300B	0.05 to 0.60 MPa	OZ-60S	0.05 to 0.60 MPa
OZ-100BL to 200BL	0.05 to 0.60 MPa	OZ-F	0.05 to 0.60 MPa
OZ-120PSP	0.05 to 0.50 MPa		

Eliminating static from electronic devices

1. Eliminating static at the wafer lever (film separation process and in the vicinity of the carriers)
2. Eliminating static from dicing equipment (film separation process and in the vicinity of the carriers)
3. Device inspection equipment
4. ESD countermeasures during the conveyance of items after the mounting process
5. Equipment used in the device mounting process
6. Eliminating static from the operating parts of robots used for mounting components and so forth
7. Assembly lines for small products such as mobile phones
8. Pinpoint ionizing of products such as DVD pickups that are susceptible to ESD



Eliminating static at the wafer



Elimination of static from electronic components



Pinpoint ionizing of precision parts that are being fed by a parts feeder or similar device



Elimination of static (and dust) from the inside of containers with a small diameter

A wide variety of nozzle applications provided to meet various application needs.

Option

- Seamless carrier pipes nozzle (external diameter: $\phi 11$)
There is a teflon tube in the pipe.
It is bent more freely than a past DK pipe.



- Option nozzle



These nozzles are not for Nitrogen use.

- Nozzle (standard type)



(OZ-S)

- Shower nozzle (60° spray angle)



(OZ-60S)

- Bar nozzles Stainless steel pipe (external diameter: $\phi 4$; internal diameter: $\phi 3$)



120mm (OZ-120PSP)

- Bar nozzles (straight type)



100mm用 (OZ-100B)

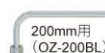


200mm用 (OZ-200B)



300mm用 (OZ-300B)

- Bar nozzles (L-type)



200mm用 (OZ-200BL)



100mm用 (OZ-100BL)

- Teflon carrier tube nozzle (external diameter: $\phi 6$; internal diameter: $\phi 4$)

500mm (OZ-TT)

- Silicon carrier tube nozzle (external diameter: $\phi 6$; internal diameter: $\phi 4$)

500mm (OZ-ST)

- AC adapter, Connection cable

(OZ-24V)

Power supply only

(OZ-24VA)

Power supply+signal cable+grounding wire



For Nitrogen application OZ-N series

These nozzles are for only nitrogen use.

- Seamless carrier pipes nozzle (external diameter: $\phi 11$)
There is a teflon tube in the pipe.
It is bent more freely than a past DK pipe.



- Nozzle (standard type)



(OZ-N-S)

- Teflon carrier tube nozzle (external diameter: $\phi 6$; internal diameter: $\phi 4$)

500mm (OZ-N-TT)

- Silicon carrier tube nozzle (external diameter: $\phi 6$; internal diameter: $\phi 4$)

500mm (OZ-N-ST)

