

## Nozzle Type

### N-1

Ultra-compact slim ionizing nozzle

Decay time 1.0 sec or less

### N-3

Interchangeable nozzles for a versatile application

Decay time 1.0 sec or less

### HPN-1 →P33

Good for Highly Charged Products  
Good for an automated production line

Decay time 0.5 sec. or less

### HPF-1 →P34

Good for Highly Charged Products  
Flexible installation angle adjustment

Decay time 1.0 sec. or less

Why is VESSEL's nozzle type our customer's top choice?

1

LED indicators clearly indicate the operating status

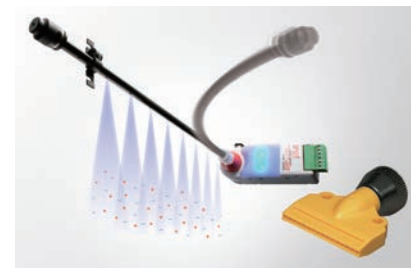
The bright LED lamps show the operating state even when installing in dark systems.



2

Diverse lineup of optional nozzles support various applications

Use the optional shower nozzle or silent nozzle.



3

Daisy-chain the power cables to keep high-voltage cables inside and ensure safety

Power can be supplied to multiple units by daisy-chaining them. 24 VDC wiring enhances safe connection.



Fan Type

Nozzle Type

Gun Type

Bar Type

Ion Parts Cleaner

EPA Working Mat

Clean Walker

Options

### Super Slim Ionizing Nozzle

Super Compact Slim Body.

N-1



EDP No. 621639

High Voltage Transformer	Ion balance	Decay time
Piezoelectric high-frequency AC corona discharge	within $\pm 10$ V	1.0 sec or less

Power supply: DC24V	Power supply: AIR/N2 max 0.6MPa	AC Adapter (Option)	Screw-type needle electrode	"ON" lamp	ALARM H.V.	External grounding terminal
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- Super slim and compact design enabling to be installed at any place for any direction. 27.5mm×28mm.
- Equipped with 6-pole terminals enabling high voltage alarm signal output as well as 24VDC daisy-chain connection.

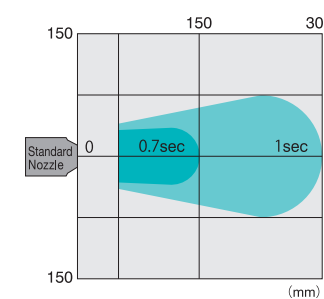


Alarm outputs and daisy chains possible.

#### Specifications

Model No.	N-1
Ionizing method/Applied voltage	Piezo high-frequency AC Corona discharge method/AC5kV (p-p)
Power supply and current consumption	DC24V±5% / 100mA(max.)
Ion balance	within $\pm 10$ V
Decay time	1.0 sec or less (standard nozzle: 0.3MPa, 150mm) (measured values)
Operating distance	50 mm to 600 mm
H×W×Dmm	L109.6×W27.5×H28mm (with standard nozzle mounted)
Weight	80 g (with standard nozzle mounted)
Air supply hose diameter	tube fitting $\Phi 6$ mm
Operating fluid	Clean dry air (0.1MPa to 0.6MPa), nitrogen N <sub>2</sub> (0.1MPa to 0.6MPa)
Air Consumption	219 ℓ/min (With standard nozzle mounted, at 0.3 MPa)
Noise	96dBA (With standard nozzle mounted, at 0.3MPa)
Ozone production	0.05ppm or less (measured 50mm)
Operating environment temperature and humidity	5°C to 40°C/35% to 65% RH (with no dew condensation or freezing)
Accessories	Standard Nozzle (included with device)

Decay area Air Pressure : 0.3MPa



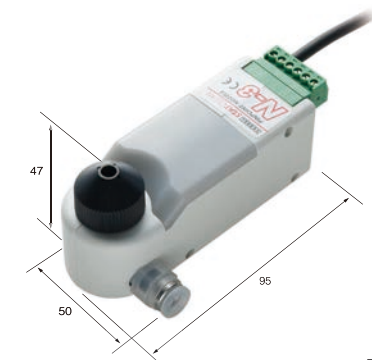
#### Accessories



### Pinpoint Ionizing Nozzle

Featuring an LED indicator that communicates the device's operating status at a glance

N-3



EDP No. 621654

High Voltage Transformer	Ion balance	Decay time	Directive
High voltage AC corona discharge	within $\pm 10$ V	1.0 sec or less	CE

Power supply: DC24V	Power supply: AIR/N2 max 0.6MPa	AC Adapter (Option)	Screw-type needle electrode	"ON" lamp	ALARM H.V.	External grounding terminal
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- Easy to wire with connector terminals.
- Diverse nozzles support various applications.



Standard Nozzle (included as accessory)

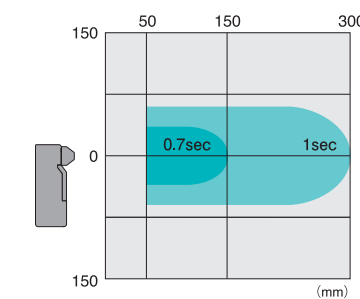


Alarm outputs and daisy chains.

#### Specifications

Model No.	N-3
Ionizing method/Applied voltage	Piezo high-frequency AC Corona discharge method/AC5.6kV (p-p)
Power supply and current consumption	DC24V±5% / 90mA(max.)
Ion balance	within $\pm 10$ V
Decay time	1.0 sec or less (standard nozzle: 0.3MPa, 150mm) (measured value)
Operating distance	50 mm to 600 mm
H×W×Dmm	L95×W50×H47mm
Weight	104g (with standard nozzle mounted)
Air supply hose diameter	tube fitting $\Phi 6$ mm
Operating fluid	Clean dry air (0.1MPa to 0.6MPa), nitrogen N <sub>2</sub> (0.1MPa to 0.6MPa)
Air Consumption	210 ℓ/min (With standard nozzle mounted, at 0.3 MPa)
Noise level	99.4 dBA (With standard nozzle mounted at 0.3MPa)
Ozone production	0.05ppm or less (measured 50mm)
Operating environment temperature and humidity	5°C to 40°C/35% to 65% RH (with no dew condensation or freezing)
Accessories	Standard Nozzle (included with device), Power supply harness

Decay area Air Pressure : 0.3MPa



#### Accessories

