

**VESSEL**®

# Super Compact Slim Body

A rotating nozzle enables to ionize anywhere.



**STAT-CLEAN**

**N-1**

Super Slim Nozzle-Type Ionizer

# The N-1 features an outstanding ionizing performance with a new-concept rotating nozzle in a compact body for installation in confined spaces.

## Super slim and compact design enabling to be installed at any place for any direction

The newly developed high voltage transformer and control circuit further enhance the operability.



## Change the blow direction by turning the rotary corner nozzle (included as accessory).

The nozzle position clicks at 90° intervals.



The corner nozzle minimizes resistance in a tube through which ions pass, and prevents the volume of ions from decreasing.

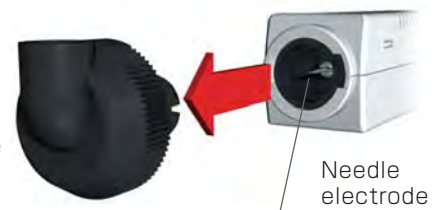
In the case of using an air piping, mixture inside a long tube causes ions to decline, resulting in inferior ionizing performance.



Corner nozzle (elbow)

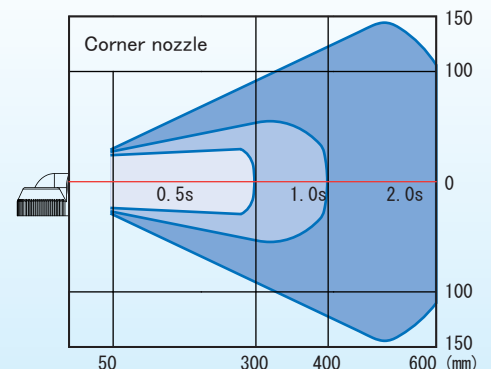
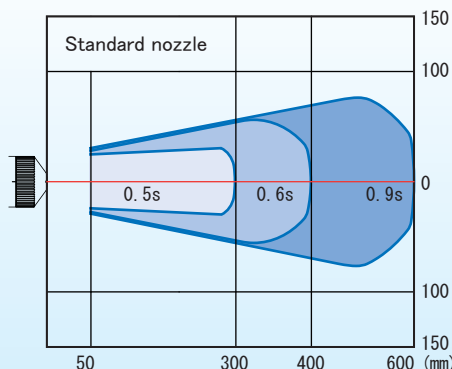
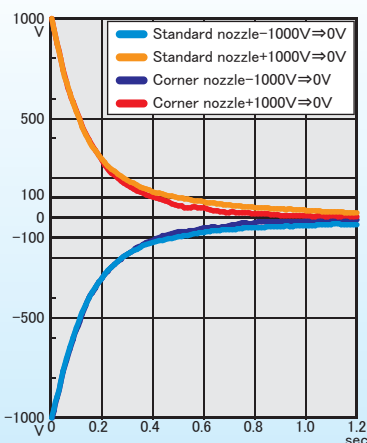
## Easy to replace the nozzles and clean the electrode needle.

The screw-type nozzle can be removed easily. The needle electrode can be cleaned easily just after removing the screw-type nozzle.



Needle electrode

## Decay time / Static erasing area



\* The decay time is measured with the time for the voltage to decay from  $\pm 1000$  V to  $\pm 100$  V at an operating air pressure of 0.3 MPa and the CPM 20 pF (150×150 mm) installed 150 mm to the front. The static erasing area is measured with the time for the voltage to decay from  $\pm 1000$  V to  $\pm 100$  V at an operating air pressure of 0.3 MPa and the CPM 20 pF (150×150 mm).

# STAT·CLEAN N-1

## SUPER SLIM NOZZLE

EDP No. 621639



Standard nozzle (straight)

### Alarm outputs and daisy chains.

With the 6-pole terminals enabling the high voltage error signals to be output and the 24 VDC power to be supplied.



### Lamps for easy recognition of operating status.

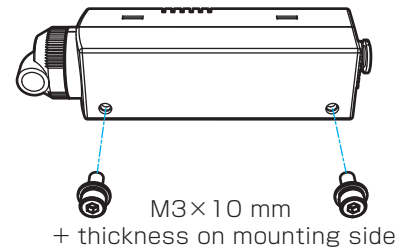
The blue lamp lights during normal operation.



The red lamp lights when high voltage error occurs.

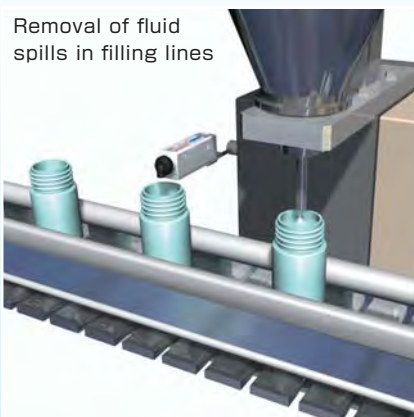


### Simple and easy mounting with 2 screws.



### Applications

Removal of fluid spills in filling lines



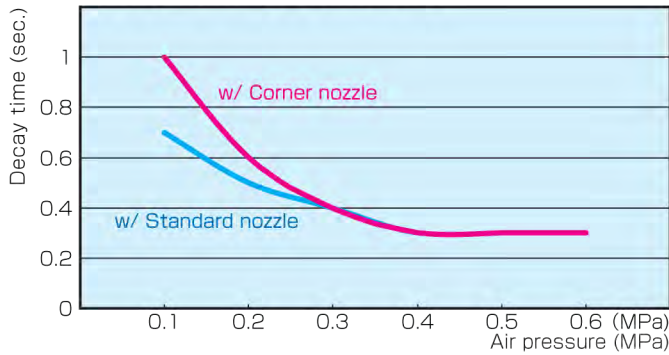
Mounting onto chuck panels



Prevention of part feeder travel faults

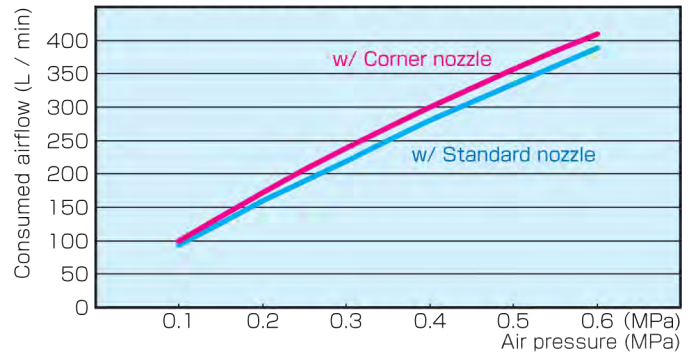


## Decay time performance



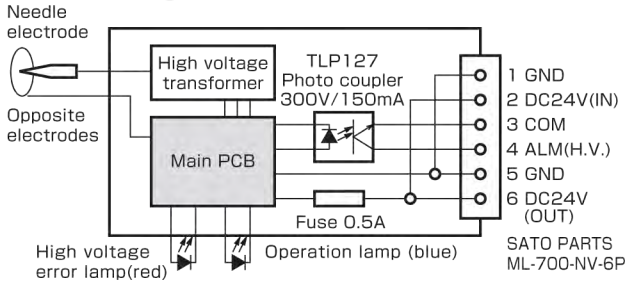
Measured the time to decay from - 1000 V to - 100 V by changing the supplied air pressure.  
Measured with the CPM 20 pF (150×150 mm) installed 150 mm to the front.

## Airflow consumption characteristics



Measured the consumed airflow by changing the supplied air pressure.

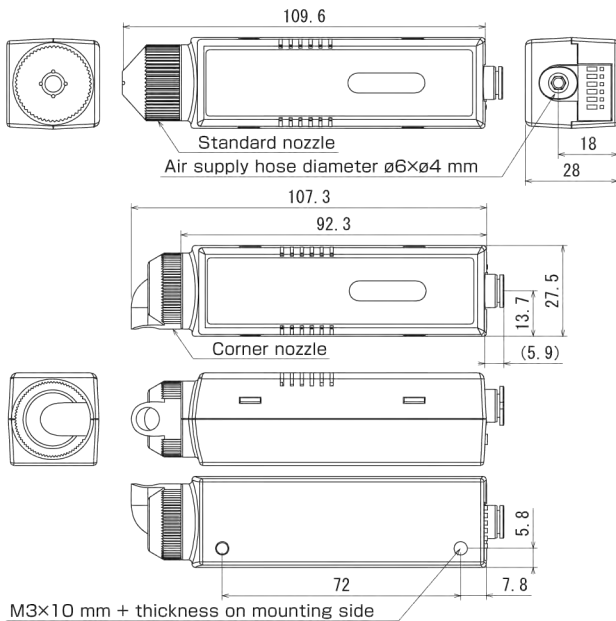
## Circuit diagram



## Specifications

Ionizing method	Piezo high-frequency AC Corona discharge method
Applied voltage	5.0 kVAC p-p
Input power	24 VDC ± 5 % ripple (P-P) 10 % or less
Current consumption	100 mA
Operating fluid	Clean dry air or nitrogen (N <sub>2</sub> )
Operating air pressure	0.1 to 0.6 MPa
Air consumption flow	Refer to table above (These are measured values and not guaranteed values)
Ion balance	± 10V (with Standard Nozzle, measured 150mm from device, at 0.3MPa)
Decay time	Refer to table above (These are measured values and not guaranteed values)
Ozone production rate	0.05 ppm or less (measured 50mm from device at 0.2MPa)
Safety functions	Red lamp lights when stopped with high voltage error (Blue lamp lights during normal operation) Current fuse 0.5 A / 60 VDC mounted on PCB
Weight	62 g (with standard nozzle mounted) 61 g (with corner nozzle mounted)
Dimensions	L 109.6 × W 27.5 × H 28 mm (with standard nozzle mounted) L 107.3 × W 27.5 × H 28 mm (with corner nozzle mounted)
Operating environment temperature and humidity	5 to 40 °C, 35 to 65 %RH (with no dew condensation or freezing)
Storage environment temperature and humidity	0 to 60 °C, 35 to 85 %RH (with no dew condensation or freezing)
Vibration resistance	60 minute cycle at 10 to 55 Hz frequency in each direction X, Y and Z
Material	Body / Nozzle: Flame-retardant ABS resin Needle electrode: Stainless steel
Accessories	Instruction Manual, Standard nozzle×1, Corner nozzle×1
Noise level	0.1 0.2 0.3 0.4 0.5 0.6 MPa
(With standard nozzle mounted)	83.1 90.4 94.0 96.2 97.6 98.8 dBA
(With corner nozzle mounted)	80.7 88.5 92.0 94.4 96.7 98.2 dBA
* The noise is measured at 1 m from the side of the blowoff port. (Note that the measurement probe must not be in direct contact with blowoff.)	

## External dimensions



## Replacement parts

Needle electrode	N-1H	
Speed controller	G-7SC	EDP No. 621373
Micro-filter	G-7F	EDP No. 621702

## Options

Screwdriver for needle electrode replacement	
G-7DR	EDP No. 806061
AC adapter(I/P:AC100V-240V O/P:DC24V 0.75A)	
AD24-IT-EX	EDP No. 806050



- For safety purposes, read the instruction manual carefully before using the unit.
- Do not use this product in an explosion-proof area.
- A high voltage is applied on this product. Make sure that water, oil, solvents, etc., do not come in contact.

- Avoid dew condensation as it can result in electric shock or product damage.
- Keep away metal objects such as tools or needles, or body parts such as fingers, hands or face from the needle electrode because a high voltage is applied on the needle electrode.