

**VESSEL**

Let us think.

*New*

Static Electricity Removal

**HIGH POWER IONIZING NOZZLE**

CE RoHS

No. **HPN-1** (Shielded cable included)



**HIGH POWER SYSTEM**

**STAT-BUSTER**

*Good especially*

*for highly charged products*



Newly Developed

High Voltage  
Power Supply Unit

No. **GP-1 4kV**  
(Option)

CE RoHS

- Detects high voltage by an anomaly detection circuit.
- Can adjust Ion Balance with adjusting volumes.

*Commercial Frequency Type  
High Voltage Power Supply*  
**STATBUSTER**

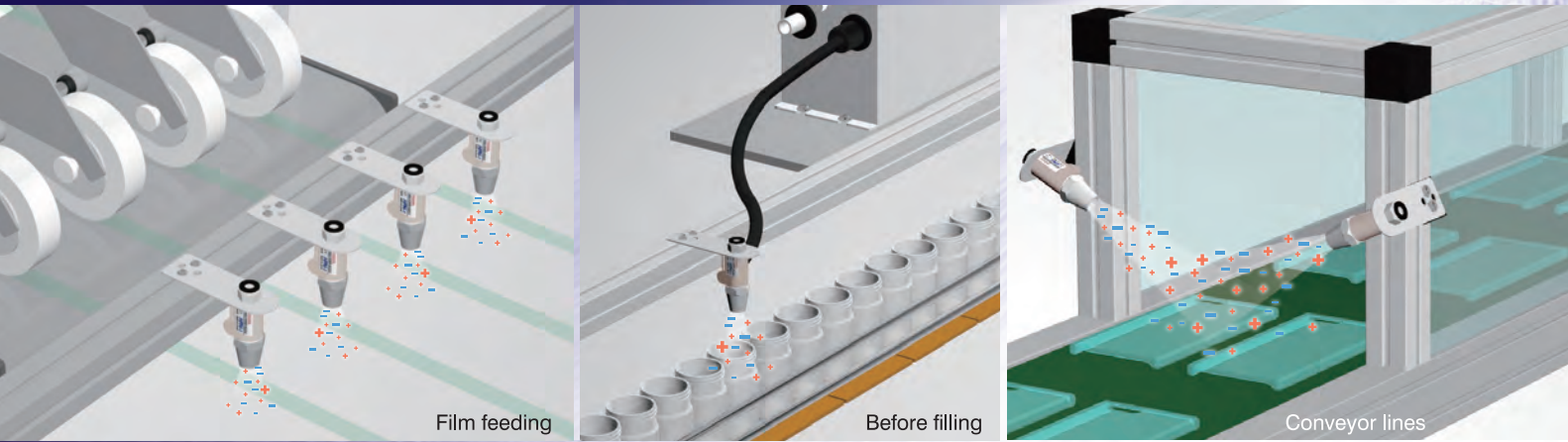


**OUTPUT 4kV**

Use this product with the GP-1 4kV.

**Removal of static electricity and dust in the following applications:  
Bag-making / Film packing / Molding / Robotic conveyance and pick-up / Food container**

# Commercial Frequency Type High Voltage Power Supply **STATBU**



**The Power Nozzle HPN-1 can blow off dusts as well as remove static electricity by compressed air. The power should be supplied by the Commercial Frequency Type High Voltage Power Unit GP-1 4kV.**

## Features

### Titan electrode needle

- \* Less-wearing titan electrode needle enhances the ionizing performance for a long time and with stability.
- \* Replaceable.



### A Shielded Cable is included as standard.

A high voltage shielded cable, less affected by the electrical noises

### Ion Balance Circuit (High Voltage Power Supply Unit GP-1 4kV)

Ion balance can be easily adjusted by using a volume allocated on the GP-1 4kV.

### Anomaly Detection Circuit/Safety Circuit (High Voltage Power Supply Unit GP-1 4kV)

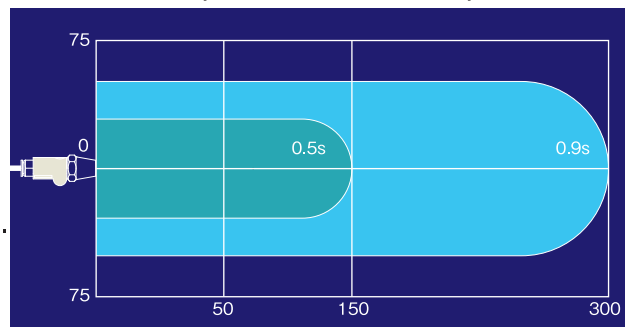


- \* Output stops automatically when there occurs any anomaly on the high voltage supply (e.g. short-circuited, overcurrent, or else)
- \* Alarm output terminals can emit the signal to external devices to communicate the operation status.

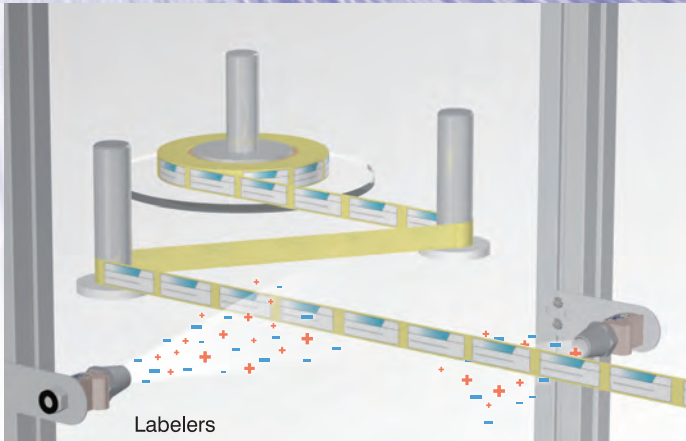
※During normal operation, the pilot lamp of the GP-1 4kV is lighten. When there happens anomaly, the pilot lamp is OFF and the power supply stops automatically.



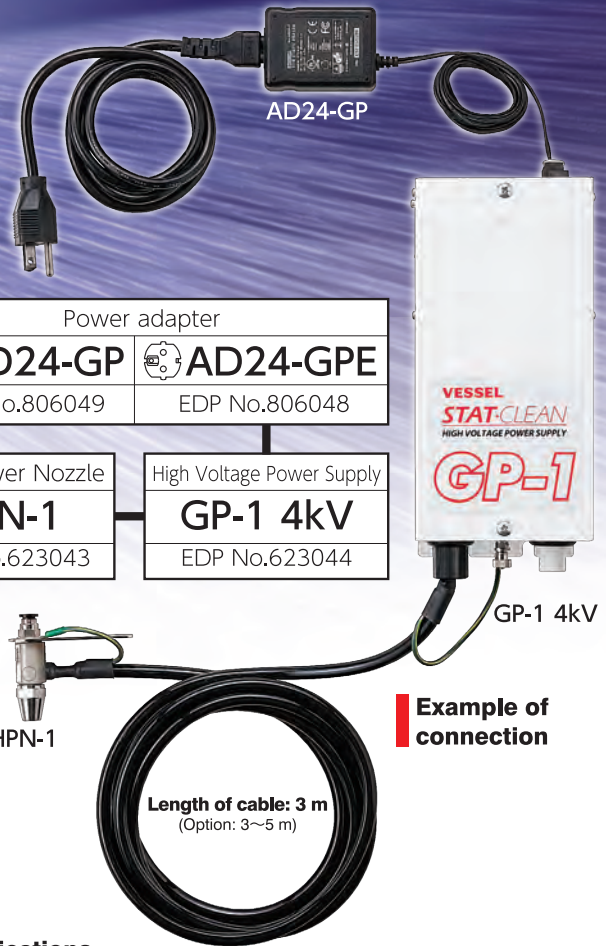
### Performance (Air Pressure: 0.3 MPa)



Normal Anomaly



Labelers



Power adapter	
<b>AD24-GP</b> EDP No.806049	<b>AD24-GPE</b> EDP No.806048
High Power Nozzle <b>HPN-1</b> EDP No.623043	High Voltage Power Supply <b>GP-1 4kV</b> EDP No.623044

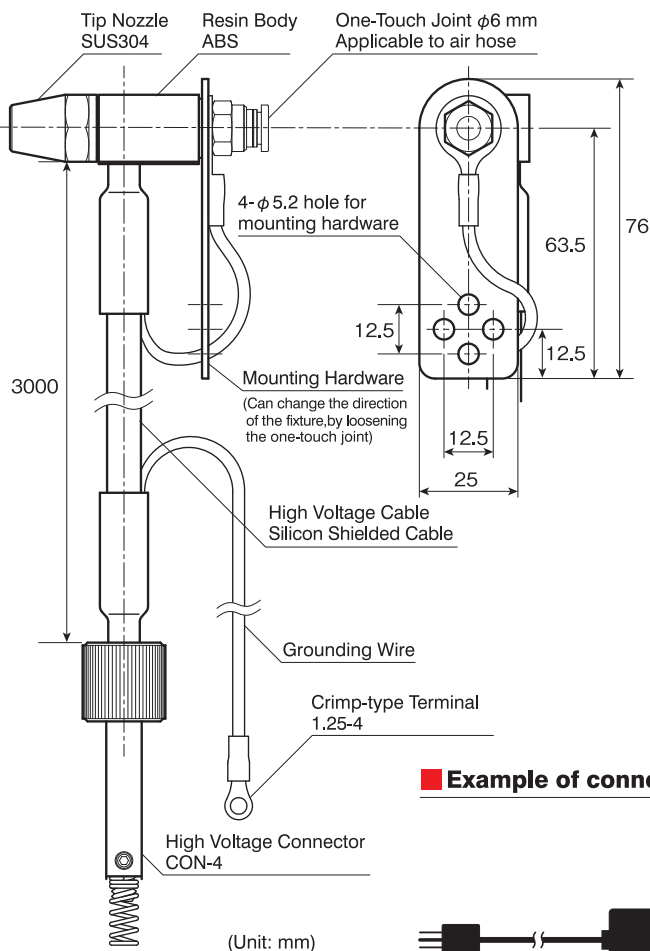
HPN-1

GP-1 4kV

**Example of connection**

**Length of cable: 3 m**  
(Option: 3~5 m)

## Dimensions

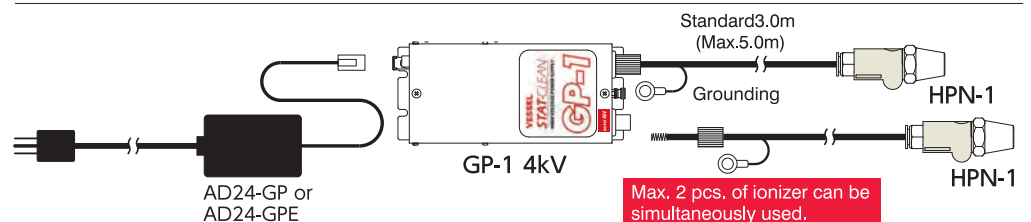


(Unit: mm)

## Specifications

Model	HPN-1
Type	High voltage applied type ionizer
Structure	Direct-coupled (Touch the electrode when applying current may bring electric shocks)
Applied High Voltage	High Voltage Power Supply Unit GP-1 4kV
Ionizing Method	AC corona discharge
Applied Voltage/Frequency	3.5kVAC / 50/60 Hz
Operating Fluid/Input Pressure	Clean air/Max.input pressure 0.7MPa
Operating Temp./Humidity	0~45°C/10~90%RH (without freezing or dew condensation)
Storage Temp./Humidity	-30~50°C/10~90%RH (without freezing or dew condensation)
Installation Distance	50mm~300mm approx. (between charged product and discharge tip of nozzle)
Decey Time	Approx. 0.5sec. (Input air pressure: 0.3MPa, distance: 150mm)
Ion Balance	Adjustable on GP-1 4kV (Charged plate monitor or an equivalent is required.)
Installation Place	Indoor
Protective Circuit	High voltage power supply unit GP-1 4kV has high voltage anomaly detection function and automatic stop circuit.
High Voltage Cable	3m (standard), silicon shielded cable
Connector	High pressure connector CON-4
Air Connection	dia.6mm tube applied, one-touch joint
Material	Nozzle: PA66+SUS304, Electrode needle: Titanium
Size	Refer to the external drawing (on the next page).
Weight	Approx.350g, including high pressure cable (3m), standard mounting hardware, and high pressure connector.
Noise	Approx. 95dBA (Input air pressure: 0.3MPa)
Air Consumption	Approx. 110L/min (Input air pressure: 0.3MPa)

## Example of connection



**Max. 2 pcs. of ionizer can be simultaneously used.**

## Static electricity removal High Power Ionizing Nozzle No. HPG-1



CE RoHS

### Specifications

Model	HPG-1
Type	High voltage applied type ionizing
Structure	Direct-coupled (Touch the electrode when applying current may bring electric shocks)
Applied High Voltage	High Voltage Power Supply Unit Gp-1 4kV
Ionizing Method	AC corona discharge
Applied Voltage /Frequency	3.5kVAC / 50/60Hz (to be set and/or adjusted on the GP-1 4kV)
Operating Fluid / Input Pressure	Clean air/max. input pressure of 0.7MPa (PROHIBITED TO SUPPLY AIR AT MORE THAN 0.7MPa.SERIOUS RISK OF DAMAGE OR BREKAGE ON THE BODY AND OTHER PARTS)
Operating Temp./Humidity	0~45°C/10~90%RH(without freezing or dew condensation)
Storage Temp./Humidity	-30~50°C/10~90%RH(without freezing or dew condensation)
Installation Distance	50mm~300mm approx. (between a charged product and discharge tip of the gun)
Decey Time	Approx. 0.5 sec. (Input air pressure: 0.3MPa, Distance: 150mm)
Ion Balance	Adjustable on GP-1 4kV (Charged plate monitor or an equivalent is required.)
Installation Place	Indoor
Protective Circuit	High Voltage Power Supply GP-1 4kV has high voltage anomaly detection function and automatic stop circuit.
High Voltage Cable	3m (standard), silicon shielded cable
Termination Connector	High pressure connector CON-4
Air Connection	Outer dia.8mm tube applied, one touch joint
Material	Air gun: Aluminum die-cast, Nozzle: PA66+SUS304, Electrode needle: Titanium
Weight	Approx. 550g,including high pressure cable (3m) and high pressure connector.
Noise	Approx. 95dBA (Input air pressure:0.3MPa)
Air Consumption	Approx. 110L/min (Input air pressure:0.3MPa)
Life Expectancy	10,000 hours (only as a guide) (8hours operation×250days×5years)

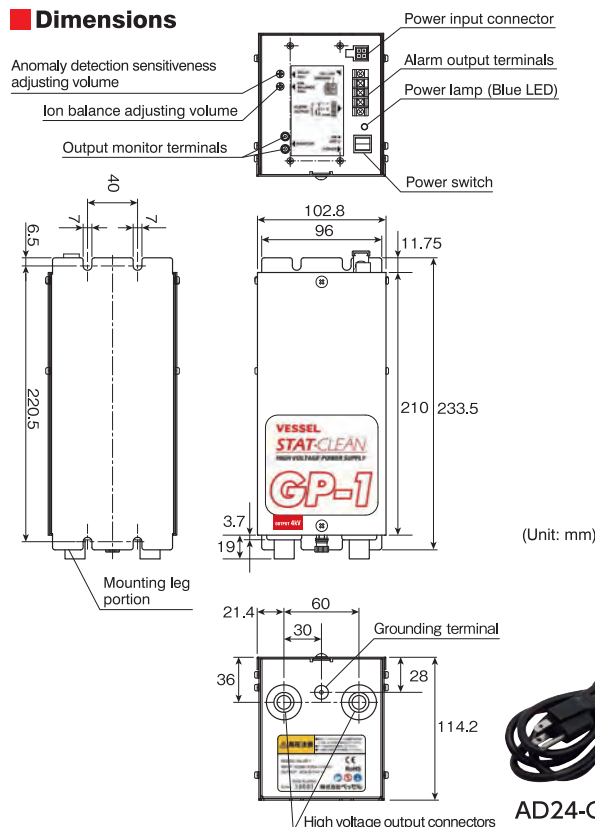
- \* Titanium electrode needle (discharge electrode)
- \* Silicon shielded cable for high voltage.
- \* The body of the air gun is robust aluminum die-cast.
- \* The air gun is equipped with an easy-handling lever.
- \* Ion Balance Circuit  
(High Voltage Power Supply Unit GP-1 4kV)
- \* Safety circuit/Anomaly detection circuit  
(High Voltage Power Supply Unit GP-1 4kV)

## High Voltage Power Supply No. GP-1 4kV

### Specifications

Model	GP-1 4kV
Operating Temp./Humidity	0~50°C/10~90%RH(without freezing or dew condensation)
Storage Temp./Humidity	-30~70°C/10~95%RH(without freezing or dew condensation)
Installation Place	Indoors
Rated Input Voltage	24V DC±10%
Variable Output Range Without Loud (rms)	AC output 4kV DC output -150 to +550V
Secondary Short Circuit Current	5 mA or lower
Output Monitor	1/1000V±5% of the output voltage is emit to the monitor terminals.
Low-voltage Detection	Anomaly detection function will operate when each output drops to about 85% or less of the set voltage due to high voltage short circuit or abnormal sparks.
Overcurrent Detection	Anomaly detection function will operate when the output current is about 4mA or more.
Anomaly Detection Sensitivity Adjustment	The anomaly detection response speed can be adjusted (using external adjustment knob)
Power Supply Input	Molex 5569-04A1-210
High Voltage Output Connector	Ceramic high voltage output terminal×2
Alarm Output Terminal	C contact relay output
Switches And Displays	On-off rocker switches. Blue LED power indicator lamp (goes off when anomaly is detected)
Material	Housing SPCC, painted white
Size	W102.8×D233.5×H114.2mm
Weight	Approx. 4.5kg

### Dimensions



### Power adapter Specifications

Model	AD24-GP	AD24-GPE
Rated input	100~240V AC (50/60Hz), 0.4A	
Rated output	24V DC, 0.75A	
Operating temp. Humidity	0~40°C 10~85%RH (without freezing or dew condensation)	
Coed length	DC output cord and AC input cord, approx. 1.8m each	

**WARNING** ● 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.

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