

High Power Ionizing Nozzle

Good for Highly Charged Products

Nozzle type ionizer suitable for installation in an automated production line

HPN-1



EDP No. 623043



High Voltage Transformer Piezoelectric high-frequency AC corona discharge (Option)	Ion balance Adjustable on the GP-1	Decay time 0.5 sec or less
Power supply AC3.5kV	Air Pressure max 0.7MPa	GP-1 Option
AC adaptor Option		

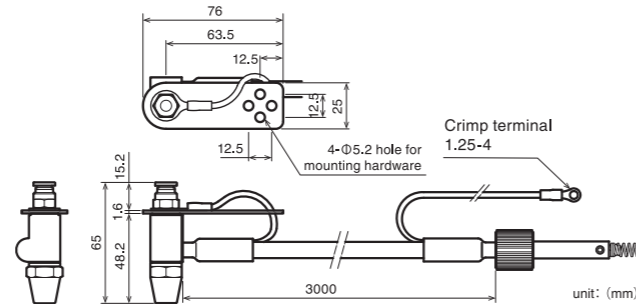
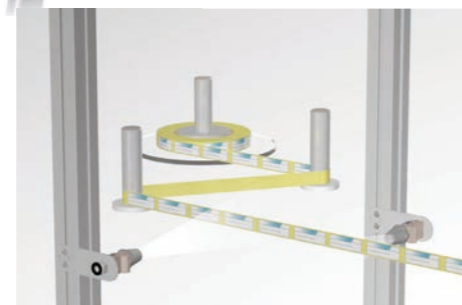
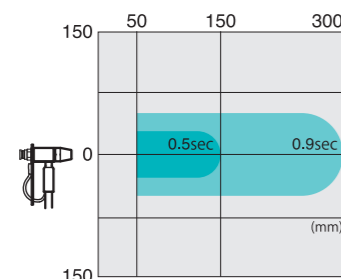
- ▶ Titanium discharge needle (discharge electrode). Less-wearing titanium provides the long-term stable ionizing performance.
- ▶ The high voltage cable is shielded so that it is less affected by the external electrical noises.
- ▶ High speed ionizing performance with compressed air.
- ▶ Ultra-compact and light-weight model suitable for installation in equipment.

Specifications

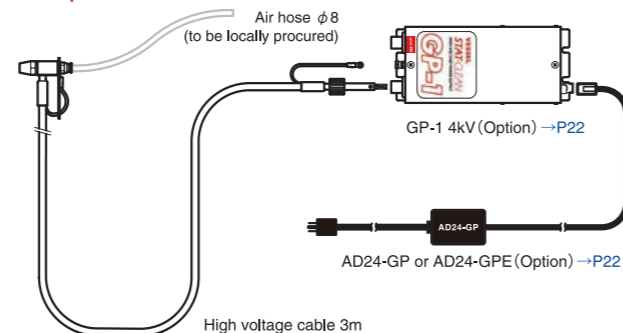
Model No.	HPN-1
Applied High Voltage	High Voltage Power Supply Unit GP-1 4kV
Ionizing Method	AC corona discharge (Structure: Direct-coupled *1)
Applied Voltage /Frequency	3.5kV AC / 50/60Hz *2
Operating Fluid / Input Pressure	Clean air/max. input pressure of 0.7MPa *3
Operating Temp./Humidity	0~45°C/10~90%RH (without freezing or dew condensation)
Storage Temp./Humidity	-30~50°C/10~90%RH (without freezing or dew condensation)
Installation Distance	Approx.50~300mm (between a charged product and a discharge tip of the ionizer)
Decay Time	Approx. 0.5 sec. (Input air pressure: 0.3MPa, Distance: 150mm)
Ion Balance	Adjustable on GP-1 4kV *4
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 *5 (High voltage connector CON-4)
Air Connection	One touch joint, outer dia.6mm tube applied
Weight	Approx.350g, including high pressure cable (3m), standard mounting hardware, and high pressure connector.
Noise	Approx. 95dBA (Air pressure:0.3MPa, Distance: 1m)
Air flow	Approx. 100L/min (Air pressure:0.3MPa)
Accessories	High voltage warning sticker, Instruction manual

*1: Do not touch the electrode when applying current; otherwise it may bring electric shocks.
*2: Use the high voltage power supply unit GP-1 4kV. *3: DO NOT SUPPLY AIR WITH MORE THAN THE DESIGNATED PRESSURE, BECAUSE OF SERIOUS RISK OF DAMAGE OR BREAKAGE ON THE BODY AND OTHER PARTS. *4: Charged plate monitor or an equivalent is required for ion balance adjustment. *5: A custom-made cable up to 5m is available on request. However, when connecting 2 sets of ionizer to the GP-1 4kV, use the 3m cable with either of them.

Decay area Air Pressure : 0.3MPa



Example of connection



High Power Ionizing Flexible Nozzle

Good for Highly Charged Products

Pin-point static electricity removal even in a place difficult for installation

HPF-1



EDP No. 623048



High Voltage Transformer Piezoelectric high-frequency AC corona discharge (Option)	Ion balance Adjustable on the GP-1	Decay time 0.5 sec or less
Power supply AC3.5kV	Air Pressure max 0.4MPa	GP-1 Option
AC adaptor Option		

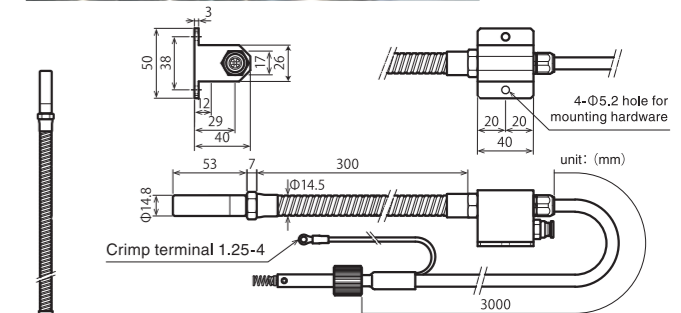
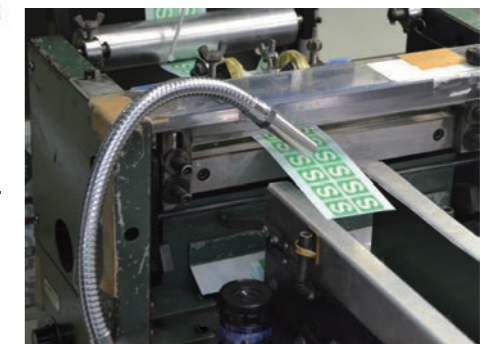
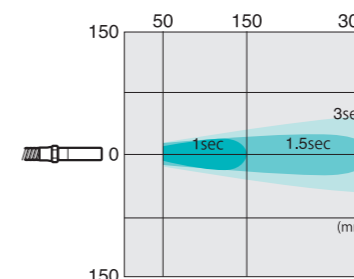
- ▶ Titanium discharge needle (discharge electrode). Less-wearing titanium provides the long-term stable ionizing performance.
- ▶ The high voltage cable is shielded so that it is less affected by the external electrical noises.
- ▶ Free angle adjustment and pin-point ionizing from a distant place. 300mm flexible tube enables to adjust the ion emission angle freely. It is possible to perform the pin-point neutralization on a charged product.
* Fix the tip of the HPF-1 with a hardware or alike, so that it does not slip, when using it by bending approximately 30° or more. (Minimum bending radius: inside dimension radius 60mm)
- ▶ High speed ionizing performance with compressed air.
- ▶ Ultra-compact and light-weight model suitable for installation in equipment.

Specifications

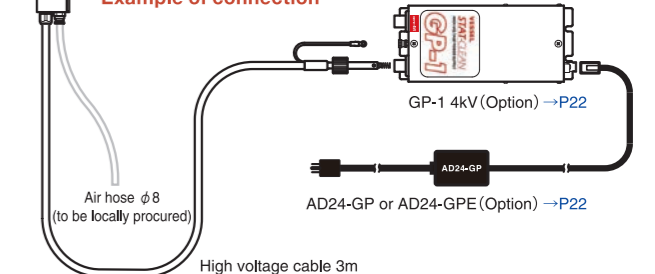
Model No.	HPF-1
Applied High Voltage	High Voltage Power Supply Unit GP-1 4kV
Ionizing Method	AC corona discharge (Structure: Direct-coupled *1)
Applied Voltage /Frequency	3.5kV AC / 50/60Hz *2
Operating Fluid / Input Pressure	Clean air/max. input pressure of 0.4MPa *3
Operating Temp./Humidity	0~45°C/10~90%RH (without freezing or dew condensation)
Installation Distance	Approx.50~300mm (between a charged product and a discharge tip of the ionizer)
Decay Time	Approx. 1 sec. (Input air pressure: 0.3MPa, Distance: 150mm)
Ion Balance	Adjustable on GP-1 4kV *4
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 *5 (High voltage connector CON-4)
Air Connection	One touch joint, outer dia.6mm tube applied
Weight	Approx.690g, including high pressure cable (3m), standard mounting hardware, and high pressure connector.
Noise	Approx. 86 dBA (Air pressure:0.3MPa, Distance: 1m)
Air flow	Approx. 100L/min (Air pressure:0.3MPa)
Accessories	High voltage warning sticker, Instruction manual

*1: Do not touch the electrode when applying current; otherwise it may bring electric shocks.
*2: Use the high voltage power supply unit GP-1 4kV. *3: DO NOT SUPPLY AIR WITH MORE THAN THE DESIGNATED PRESSURE, BECAUSE OF SERIOUS RISK OF DAMAGE OR BREAKAGE ON THE BODY AND OTHER PARTS. *4: Charged plate monitor or an equivalent is required for ion balance adjustment. *5: A custom-made cable up to 5m is available on request. However, when connecting 2 sets of ionizer to the GP-1 4kV, use the 3m cable with either of them.

Decay area Air Pressure : 0.3MPa



Example of connection



High Power Ionizing Gun

Good for Highly Charged Products
For neutralization of charged products or dust removal before painting

HPG-1



- HPG-1** EDP No. 623046 (High voltage cable 3m)
- HPG-1-4.5M** EDP No. 623047 (High voltage cable 4.5m)
- HPG-1S** EDP No. 623045 (A set of high voltage power supply unit + AC adapter (High voltage cable 3m))

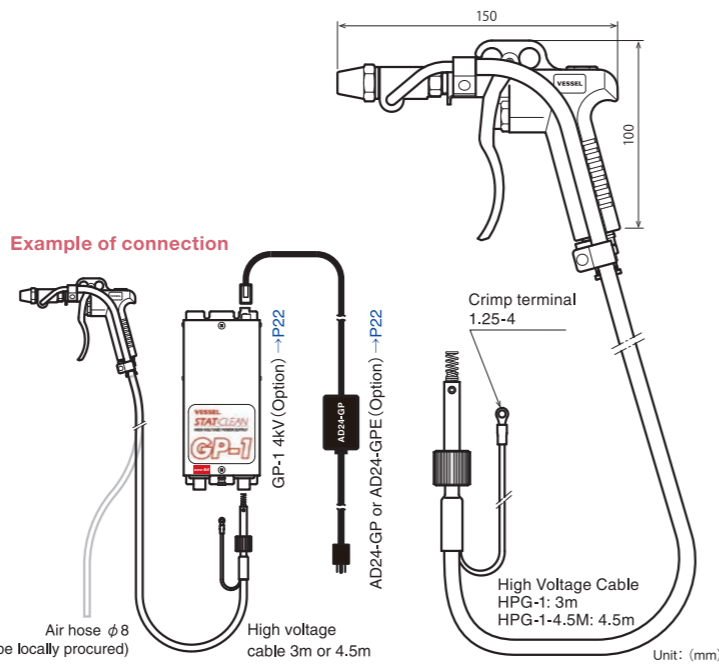
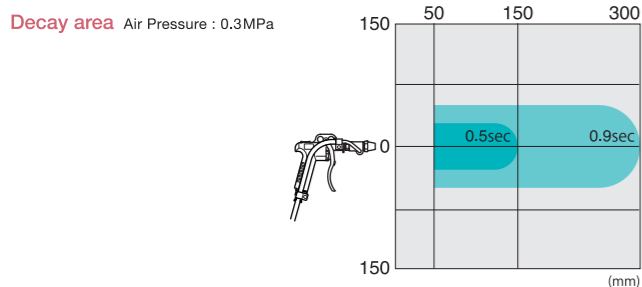
High Voltage Transformer Piezoelectric high-frequency AC corona discharge (Option)	Ion balance Adjustable on the GP-1	Decay time 0.5 sec or less
Power supply AC3.5kV	Air Pressure max 0.7MPa	GP-1 Option (Except HPG-1S)
AC adapter Option (Except HPG-1S)		

- ▶ Titanium discharge needle (discharge electrode). Less-wearing titanium provides the long-term stable ionizing performance.
- ▶ The high voltage cable is shielded so that it is less affected by the external electrical noises.
- ▶ Robust and easy handling ionizing gun. The body of the ionizing gun is made by robust aluminum die-casting. Easy handling large trigger for superior operability. Compact model for elimination of both static electricity and dust.

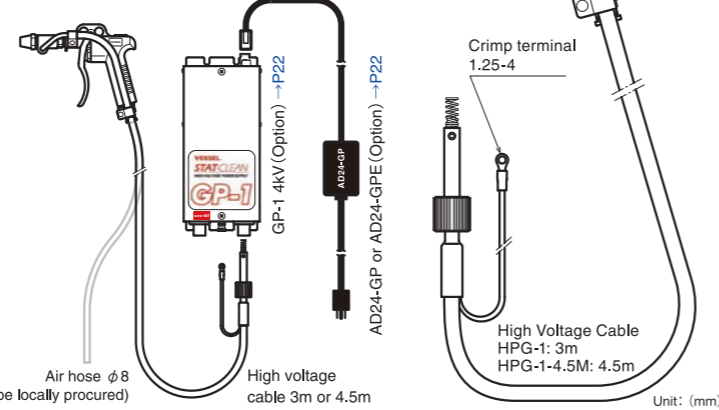
Specifications

Model No.	HPG-1
Applied High Voltage	High Voltage Power Supply Unit GP-1 4kV
Ionizing Method	AC corona discharge (Structure: Direct-coupled *1)
Applied Voltage /Frequency	3.5kV AC / 50/60Hz *2
Operating Fluid / Input Pressure	Clean air/max. input pressure of 0.7MPa *3
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	Approx.50~300mm (between a charged product and a discharge tip of the ionizer)
Decay Time	Approx. 0.5 sec. (Input air pressure: 0.3MPa, Distance: 150mm)
Ion Balance	Adjustable on GP-1 4kV *4
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 *5 (High voltage connector CON-4)
Air Connection	One touch joint, outer dia.6mm tube applied
Weight	Approx. 550g, including high voltage cable (3m) and high voltage connector.
Noise	Approx. 95dBA (Air pressure:0.3MPa, Distance: 1m)
Air flow	Approx. 100L/min (Air pressure:0.3MPa)
Accessories	High voltage warning sticker, Air consent, Instruction manual

*1: Do not touch the electrode when applying current; otherwise it may bring electric shocks.
*2: Use the high voltage power supply unit GP-1 4kV. *3: DO NOT SUPPLY AIR WITH MORE THAN THE DESIGNATED PRESSURE, BECAUSE OF SERIOUS RISK OF DAMAGE OR BREAKAGE ON THE BODY AND OTHER PARTS. *4: Charged plate monitor or an equivalent is required for ion balance adjustment. *5: A custom-made cable up to 9m is available on request (for a single piece).



Example of connection



High Power Ionizing Bar

Good for Highly Charged Products
Super slim model, designed for installation in a cramped space

HPB-series



- HPB-300** EDP No. 623316
- HPB-600** EDP No. 623336
- HPB-810** EDP No. 623350
- HPB-1005** EDP No. 623363
- HPB-1200** EDP No. 623376
- HPB-1500** EDP No. 623396
- HPB-1800** EDP No. 623416



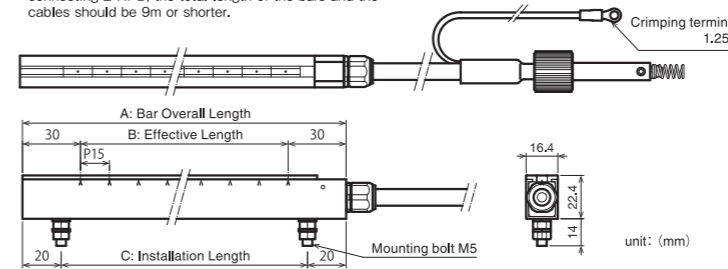
- ▶ Titanium discharge needle (discharge electrode). Less-wearing titanium provides the long-term stable ionizing performance. The needles are allocated every 15mm on the bar, allowing to generate many ions effectively. Optimum for a high speed film transfer application.
- ▶ The high voltage cable is shielded so that it is less affected by the external electrical noises.
- ▶ Super slim ionizing bar: 16.4x22.4mm (sectional dimensions). Suitable for a cramped space.
- ▶ Option: Air Assist Bar - Custom-made size is available according to the length of the HPB used together. Compressed air enables to eliminate dust and static electricity more quickly and in the distance.

High Voltage Transformer Piezoelectric high-frequency AC corona discharge (Option)	Ion balance Adjustable on the GP-1	Decay time 2 sec or less
Power supply AC3.5kV	GP-1 Option	AC adapter Option

Specifications

Model No.	HPB-300/600/810/1005/1200/1500/1800
Applied High Voltage	High Voltage Power Supply Unit GP-1 4kV
Ionizing Method	AC corona discharge (Structure: Direct-coupled *1)
Applied Voltage /Frequency	AC 3.5 kV /50/60 Hz *2
Operating Temp./Humidity	0~45°C/10~85%RH (without freezing or dew condensation)
Storage Temp./Humidity	0~50°C/10~85%RH (without freezing or dew condensation)
Installation Distance	Approx.50~100mm (between a charged product and a discharge tip of the ionizer)
Decay Time	Approx. 2 secs. (No compressed air, Distance: 100mm)
Ion Balance	Adjustable on GP-1 4kV *4
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 *5 (High voltage connector CON-4)
Weight	Approx. 540g/m, not including high voltage cable
Accessories	Instruction manual, High voltage cable (already mounted), Mounting bolt M5 (already mounted)

*1: Do not touch the electrode when applying current; otherwise it may bring electric shocks.
*2: Use the high voltage power supply unit GP-1 4kV. *3: DO NOT SUPPLY AIR WITH MORE THAN THE DESIGNATED PRESSURE, BECAUSE OF SERIOUS RISK OF DAMAGE OR BREAKAGE ON THE BODY AND OTHER PARTS. *4: Charged plate monitor or an equivalent is required for ion balance adjustment. *5: A custom-made cable is available on request. When connecting 2 HPB, the total length of the bars and the cables should be 9m or shorter.



Dimensions/No. of Needle Electrode

型番	A (mm)	B (mm)	C (mm)	No. of Discharge Needle	Weight (kg)
HPB-300	300	240	260	17	0.16
HPB-600	390	540	560	37	0.32
HPB-810	810	750	770	51	0.44
HPB-1005	1005	945	965	64	0.54
HPB-1200	1200	1140	1160	77	0.65
HPB-1500	1500	1440	1460	97	0.81
HPB-1800	1800	1740	1760	117	0.97



Example of connection

