## Static Electricity Removal High Power Ionizing Bar No. HPB

VESSEL

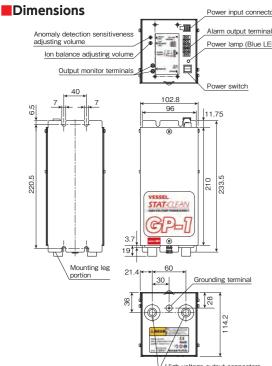
### Static Electricity Removal High Power Ionizing Bar Specifications

No.HPB **(€ RoHS**  See the inside pages for the dimensions.



- · Super slim model, design for installation in a cramped space
- Titanium needle electrode, with less electric corrosion wear
- · Silicone shielded high voltage cable, flexible and durable

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



= specifications					
Model	HPB-300/600/810/1005/1200/1500/1800				
Туре	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 (Option)				
Ionizing Method	AC corona discharge				
Applied Voltage/Frequency	3.5kVAC/ 50/60Hz (use the GP-1 4kV)				
Operating Temp./Humidity	0~45 °C/ 10~85 %RH (without freezing or dew condensation)				
Storage Temp./Humidity	0~50 ℃/ 10~85 %RH (without freezing or dew condensation)				
High Voltage Cable	3m (standard), silicon shielded cable				
End Connector	High voltage connector CON-4				
Material	Main body: Aluminum, Insulation: Frame retardant PBT(V-0), Discharge needle: Titanium				
Weight	540 g/m (cable is not included)				
Installation	Indoor				
Life Expectancy	10,000 hours (only as a reference) (8-hour operation x 250days x 5 years)				
	* This is not a guarantee.				
Accessories	Instruction manual, High voltage cable (already mounted), Mounting bolt M5 (already mounted)				
Air Acciet Bar (C	Intion)				

Air Assist Bar (Option)		
Operating Fluid/Input Pressure	Clean air/max. input pressure 0.7MPa	
Air Connection	$\phi$ 8mm tube applicable, one-touch joint	
Material	Pipe: Brass	

We will design and manufacture Air Assist Bar, according to the high power ionizing bar that you use

### Specifications

Model	GP-1 4kV
Operating Temp./Humidity	0~50°C/10~90%RH(without freezing or dew condensation)
Storage Temp./Humidity	-30~70℃/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	$1/1000V \pm 5\%$ 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



#### ■ Power Adapter Specifications

		apter specifications
	Model	AD24-GPE AD24-GPE
>	Rated input	100~240V AC (50/60Hz), 0.4A
		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 eac



● For your safety, read the instruction manual carefully before using this product. ● Never use this product in hazardous area requiring explosion proof measures. ● A high voltage is applied on this product. Make sure that water, oil, etc., do not come in contact. ● Avoid condensation as it can result in electric shock or product damage. ● Keep away metal objects such as tools or wires, or body parts such as fingers, hands, or face from the discharge needle due to applied high voltage.

## **VESSEL Co., Inc.**

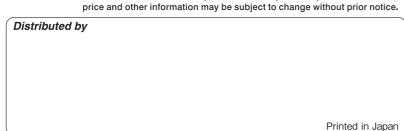
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• For improvements, the product specifications, size,



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**Static Electricity Removal** 

High Power Ionizing Bar (€ RoHS No. HPB- series

New

For highly charged or fast moving products

• Super slim model, design for installation in a cramped space

• Titanium needle electrode, with less electric corrosion wear

Silicone shielded high voltage cable, flexible and durable.

• Ion balance adjustment, Anomaly detection, Automatic stop, and Alarm output can be set with the high voltage power unit No. GP-1 4kV (option)

Common Frequency Type

High Voltage Power Supply

• Air Assist Bar is also available as option.



[Option] **High Voltage Power Supply Unit** No. GP-1 4kV

> **Power Adaptor № No. AD24-GP**

**№ No. AD24-GPE** 



Use this product with the GP-1 4kV.

STAT-CLEAN

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

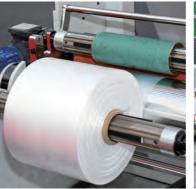
# Recommended to change the existing ionizing bars to this newly developed HPB series.

## **■**Titanium discharge needles

A titanium needle is more wear-resistant and have a longer lifetime than a regular stainless steel. The needles are located every 15mm on the bar, allowing to generate many ions effectively. This design is suitable for a high speed application.

Mounting bolt M5

## Applications





Dust adhesion: Peeling charge on a winding/unwinding

machine or during a vacuum forming

Cutting chip adhesion: Slitter winding, cutting machine

Electric discharge during film conveyance Static mark: Electric shock to a human: Electric discharge from a roll due to

static electricity accumulation

Ink flick: Peeling charge on a roller and a film Error on an inspection machine due to

static electricity

Stacking error: Stacking process of a sheet in a

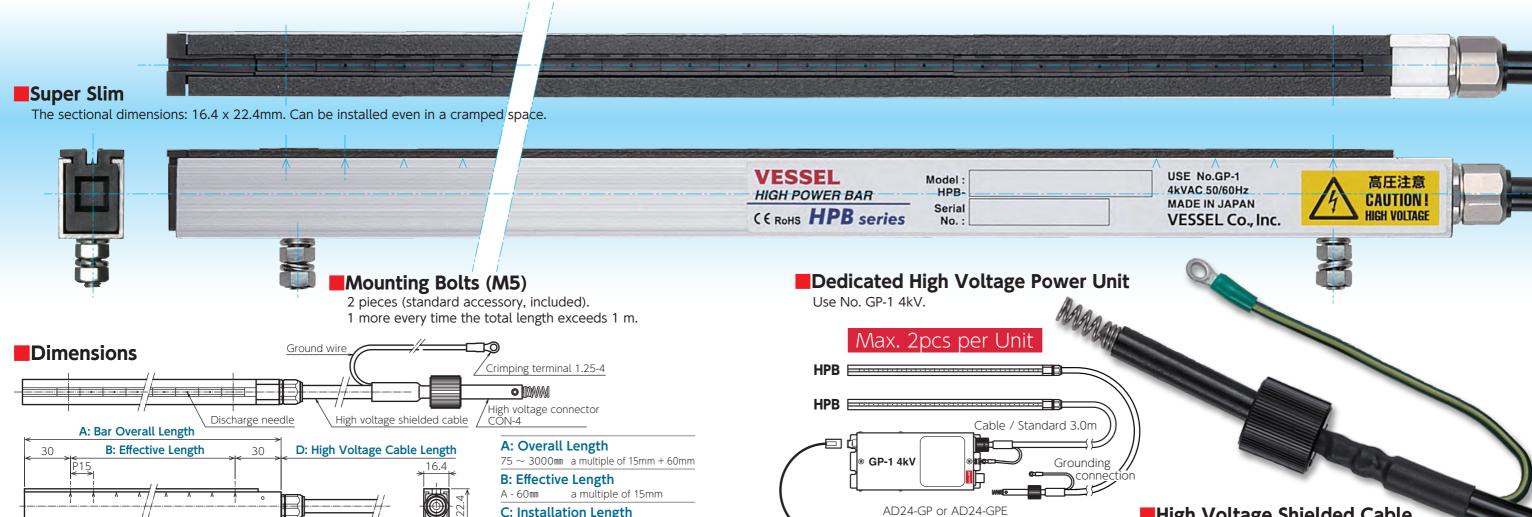
printing machine

Creases and meandering: Winding process on an inflation molding

High Voltage Shielded Cable

As the high voltage cable is shielded,

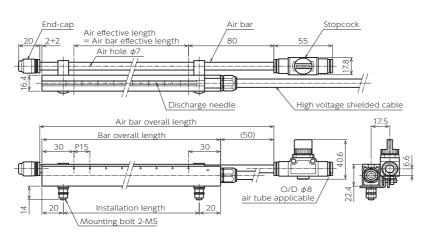
there is no need for further ground.



## Air Assist Bar (No.AAB-)

Please inquire us for this custom-made item. (Illustration of an example on the right)

C: Installation Length



C: Installation Length

D: High Voltage Cable Length

Standard 3m w/dedicated connector

1 pc added for every extra 1m

## Specifications

**Example of connection** 

Model No.	No. of Discharge Needle	Weight (kg)	Overall Length A (mm)	Effective Length B (mm)	Installation Length C (mm)	EDP No.			
HPB-300	17	0.16	300	240	260	623316			
HPB-600	37	0.32	600	540	560	623336			
HPB-810	51	0.44	810	750	770	623350			
HPB-1005	64	0.54	1005	945	965	623363			
HPB-1200	77	0.65	1200	1140	1160	623376			
HPB-1500	97	0.81	1500	1440	1460	623396			
HPB-1800	117	0.97	1800	1740	1760	623416			