

## Electroshock-proof AC Ion Bar



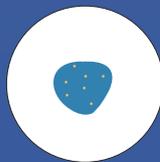


Suitable for textile, plastic, film,  
printing industries

Effectively solve the problems  
caused by static electricity



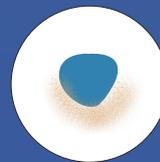
Static Removal



Prevent adhesion of objects



Prevent blockage of adhesion



Control ink splashing



Prevent uneven scattering



High efficient



Safe



Static removal

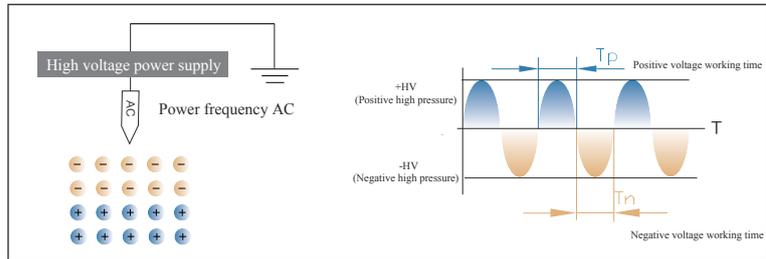


# High Efficiency Static Removal

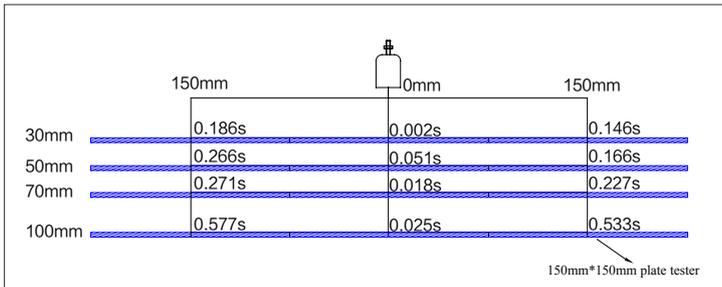
Keep a clean production environment and stay away from static electricity

## Working way

Ion bar adopts power frequency AC high voltage and acts on the dedicated emitter electrode through impedance coupling devices to ionize air molecules to generate positive and negative ions and transport them to the surface of the object to be eliminated to neutralize positive and negative electrostatic charges to achieve efficient and reliable static elimination.



## Discharge ability



Test condition: Ion bar length 1000mm  
 Test standard: ANSI/ESD.STM3.1, SJ/T 11446—2013  
 Test instrument: Trek charge plate tester  
 Test voltage:  $\pm 1000V \rightarrow \pm 100V$  attenuation  
 Test environment: humidity 50 $\pm$ 5%; temperature 23 $\pm$ 3 $^{\circ}C$

## Test data under other conditions are as follows

Test bearing chart	Ion bar length: 1120mm Power Supply: 7000v						
	Test distance (mm)		Discharge performance		Balance voltage		
	Vertical	Horizontal	Positive discharge time (s)	Negative discharge time (s)	Maximum voltage (V)	Average voltage (V)	Minimum voltage (V)
	30	-150	0.126	0.186	-220.3	-71.9	76.5
		0	0.002	-0.002	-1136.6	1.5	1139.6
		150	0.104	0.146	-292.7	-71.7	149.3
	50	-150	0.147	0.266	-244.1	-79	86.1
		0	0.051	0.003	-1130.3	-1.95	1126.4
		150	0.106	0.166	-315.4	-81.3	152.8
	70	-150	0.186	0.271	-251.1	-76.9	97.3
		0	0.018	0.004	-850.2	-59.9	730.4
		150	0.164	0.227	-318.3	-81.5	155.2
	100	-150	0.484	0.577	-219.8	-51.65	116.5
		0	0.023	0.025	-587.1	-76.95	433.2
		150	0.365	0.533	-284.7	-57.3	170.1

# Features

Safe / Easy to use / Durable



No.1

## Electroshock-proof

Protection against human electro-shock.

No.2

## Easy installation

Put the M4×20 hexagonal mounting bolts into the special strip notch on the back of the bar body which are removable and can be easily installed in different environments.



No.3

## CE certification

It can effectively avoid external electromagnetic interference affecting the normal operation of the ion bar which is a high-security and high-reliability static eliminator.



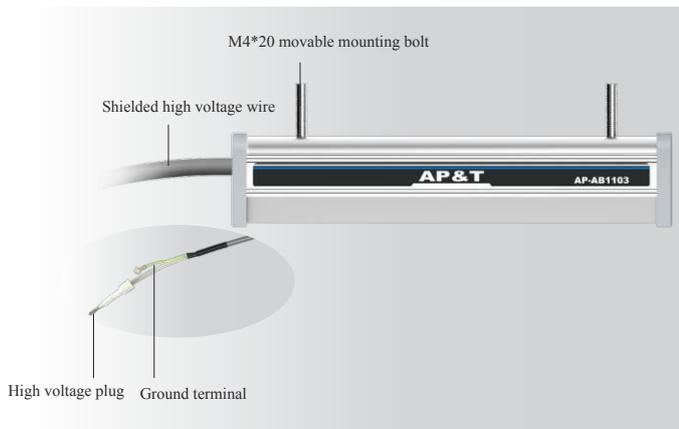
# Product specifications

Product details / Product specifications / Product size

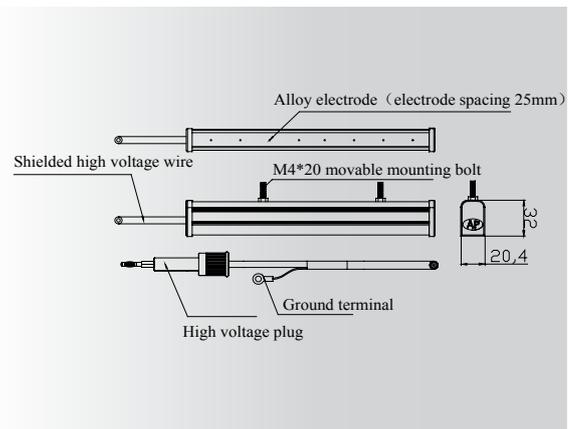
## Product specifications

Model	AP-AB1103
Working voltage	one bar length < 1m or two bars length < 1m: AC5600V one bar length ≥ 1m or two bars length ≥ 1m: AC7000V
Power	20W
Ion emission	Power frequency AC
Emitter electrode	SUS
Discharge structure	Resistance coupling
Discharge range	L*W*H ( 150mm → 3000mm ) *300mm*100mm
Installation distance	30 → 100mm
Ion balance	≤  ±30V  ( AVG )
Discharge speed	≤ 1.0S ( Working distance 100mm )
Working temperature	0°C - 50°C
Working humidity	< 70%
Dimensions	L*W*H ( 150mm → 3000mm ) *20.4mm*32mm
Bar material	Flame retardant PVC、AL
Packaging accessories	M4×20 hexagonal mounting bolts
Power adapter	AP-AY1505: one bar length < 1m; / AP-AY2505: two bars length < 1m AP-AY1502: one bar length ≥ 1m; / AP-AY2502: two bars length ≥ 1m
Power cord length	2.5m ( Customizable upon request. Maximum 10m )
Warranty	1 Year
Certification	CE

## Product details



## Product size

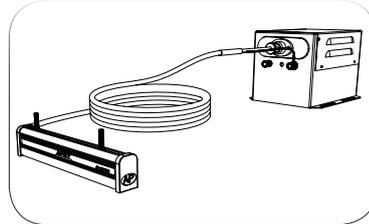


# Products Use

## Step of use/Installation position/Packing accessories

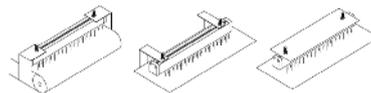
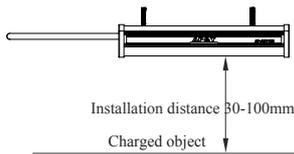
### Step of use

- (1) Select the best static discharge position and install the bar body and the supporting power supply firmly.
- (2) Insert the high-voltage plug of the bar body into the high-voltage output connecting seat of the supporting high-voltage power supply.
- (3) Connect the grounding terminal of the bar body to the grounding stud of the high voltage power supply.
- (4) Turn on the power supply and indicator light on shows the power work. The electrode pins will produce positive and negative ions to neutralize the surface static electricity of the object.



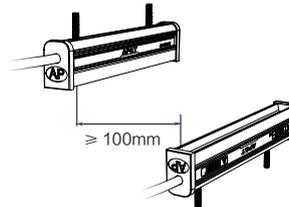
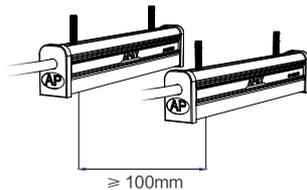
### Installation position

1. Select the best static discharge position after electrostatic detection of the working environment on site and install the bar body and the supporting power supply firmly. (It's better to be about 30~100mm away from the surface of the static discharge object) The installation angle should be perpendicular to the surface of the discharged body.

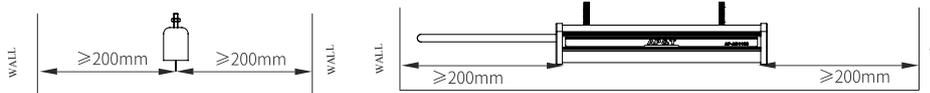


2. Ion bar strip grounding electrode is not allowed to be covered by other objects.

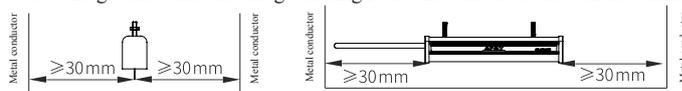
3. Two ion bars should be installed side by side with an interval of more than 100mm and should be staggered by more than 100mm if installed face-to-face.



4. More than 200mm away from obstacles such as walls.



5. Ion bar should be at least 30mm away from the metal conductor and metal grounding body around the electrode. And the bar body must be reliably connected to the ground wire and the grounding resistance should be less than 4 ohms.



### Packing accessories

Part name	Picture	Part No.	Specification	Quantity
Galvanized hexagon bolt		OJXT03001	M4*20 mounting bolt	On demand

### ▲ Safety warning

1. Read the operating instruction carefully before installing and using the device.
2. The whole equipment must be reliably grounded with a grounding resistance of less than 4 ohms during use; Otherwise, it is easy to cause abnormal or even damage of ion bar.
3. Do not use the device when the humidity is higher than 70%.
4. Do not use the device in inflammable and explosive environment.
5. It is strictly forbidden to disassemble products without authorization. Internal maintenance and repair must be carried out by professional personnel.
6. The product is strictly prohibited to touch liquid during use, otherwise there will be abnormal, resulting in electric shock or fire.
7. Power must be turned off during inspecting or replacing the product, otherwise it may cause electric shock or fire.
8. The product is specially designed for removing static electricity and is strictly prohibited for other purposes. Any abnormal use may cause machine failure, electric shock, fire and other hidden dangers.
9. It is strictly forbidden to touch the electrode needles when power is on, otherwise it is easy to cause fault and electric shock accident.
10. Discharge needle is a sharp metal object, please use it with care.
11. Please check the specifications of the power supply before powering on the product. Any power supply that does not meet the specifications may cause damage or even failure to the product.
12. Check the power cord regularly. If it is damaged, replace it immediately; otherwise, leakage and abnormal operation may occur.

### ▲ Trouble shooting

NO	Problems	Reasons	Solutions
1	The electrostatic removal performance is obviously reduced	Discharge needle is polluted and damaged	Clean or replace the ion bar
		Bearing set of ion bar is improper	Confirm the best bearing set
2	The electrostatic removal performance is reduced	There are conductors or other ion bars around	Remove conductors or other ion bars
3	Unable to discharge	High-voltage connecting wire is damaged	Return to factory for maintenance
		Ion bar insulation is damaged	Return to factory for maintenance
		Poor grounding/no grounding	Check the electrical grounding of ion bar and plant equipment
4	Product burnout	Ion bar insulation is damaged	Return to factory for maintenance

### ▲ Maintenance

1. The ion bar should be cleaned and maintained in time according to the use environment and the required electrostatic protection requirements in order to ensure the good performance of the product. That is, gently remove the carbon deposits on the discharge electrode, and bar body with electrostatic brush, dust-free cotton swab, dust-free cloth dipped in anhydrous alcohol, which will improve its performance significantly.  
Note:  
A. Operation must be done 10 minutes after power cut off.  
B. It must be cleaned when dust or white stuff appear on the tip of the needle during use. Use dust-free cloth dipped in anhydrous alcohol to clean when brush can not meet the cleaning requirements.  
C. The ion bar must be powered on after alcohol is completely volatilized after cleaning. No other organic solvent can be used to clean the ion bar.
2. If the ion bar is found to be burned, it should be stopped and repaired by professional maintenance personnel. It can be used only after the electrical performance index is normal.

### ▲ After-sales service

AP-AB1103 electroshock-proof AC ion bar has undergone rigorous testing and aging treatment before ex-work. Its performance has completely reached the relevant indicators marked in the usage instruction.

1. AP&T makes a commitment to the customer that any defective parts inspected by AP&T will be repaired or replaced free of charge within one year from the date of purchase. However, this commitment does not apply to:  
(1) The device is incorrectly used or installed.  
(2) Damage caused by negligence or accident during use.  
(3) Modified, disassembled or repaired by other service departments not authorized by Anping Company.
2. The alloy electrode is a consumable product which is not included in the scope of warranty and will be charged for replacement when repairing.
3. AP&T shall not be liable for any incorrect use of the products except for repair or replacement of parts as specified above.

# AP&T®

AP&T

Professional electrostatic intelligent monitoring/analysis  
and elimination solution provider

## Speciality Creates Value

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