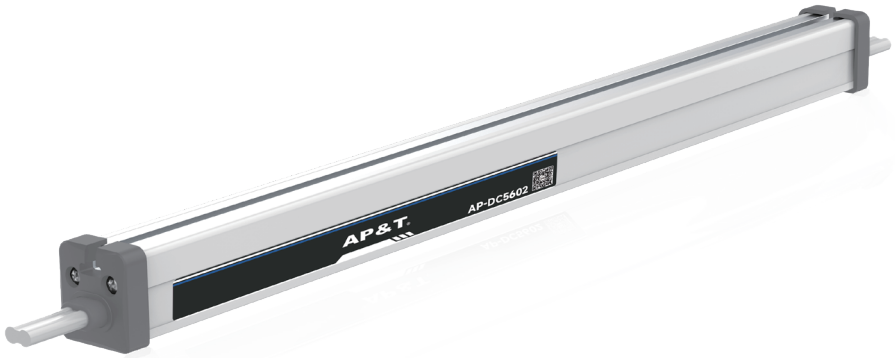
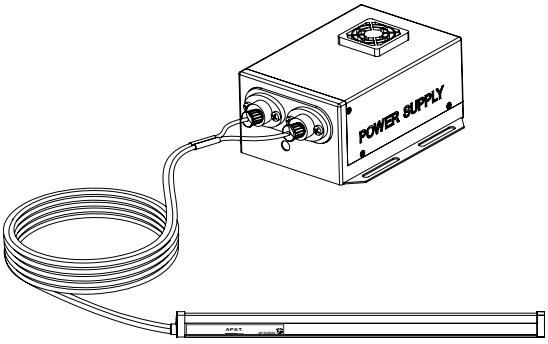
AP&T®
Shanghai Anping Static Technology Co.,Ltd

DC Ion Bar
AP - DC5602

DC Ion Bar

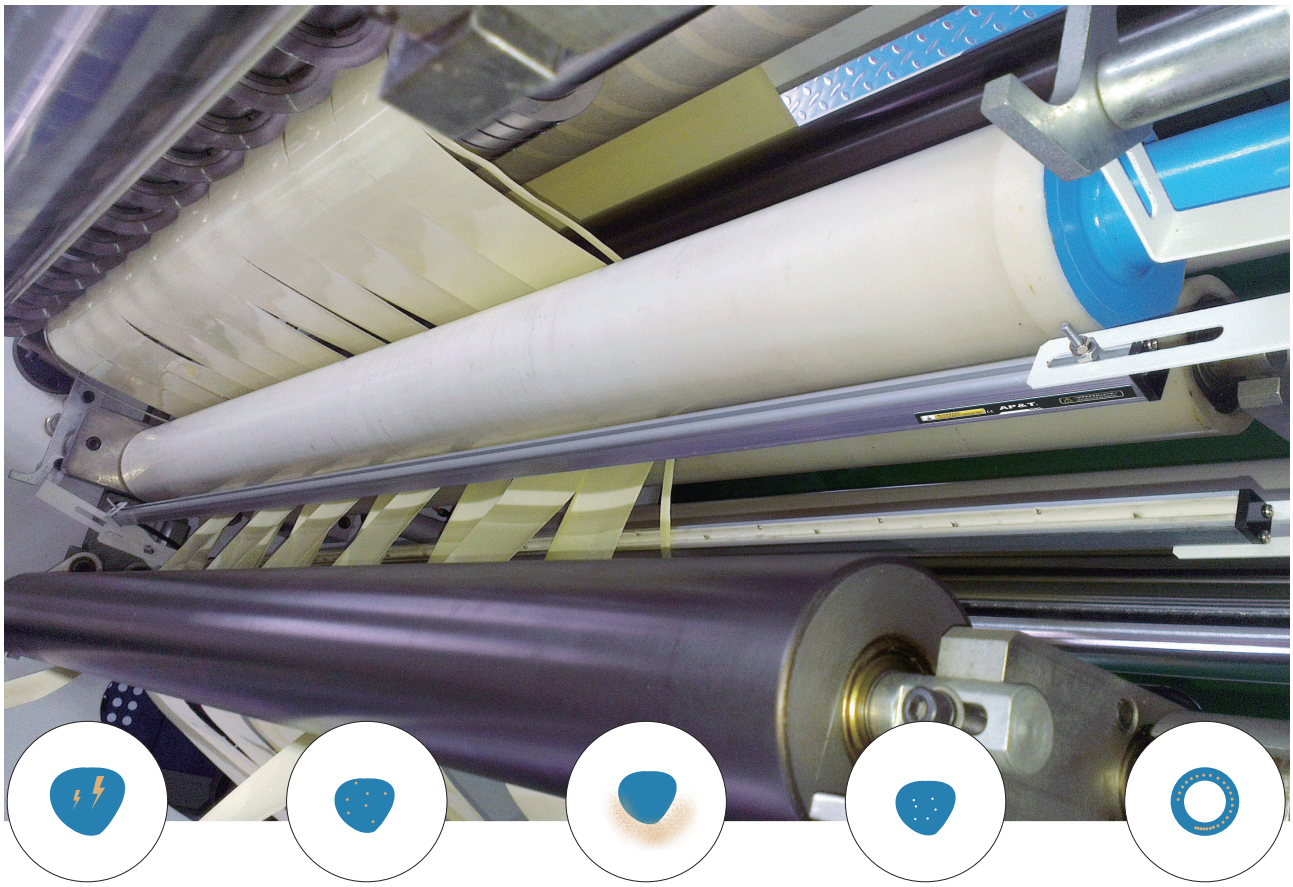




AP&T

Suitable for plastic, film,printing industries

Effectively solve the problems caused by static electricity



Static Removal

Prevent adhesion of objects

prevents material splashing

prevents electrostatic breakdown

prevents feeder clogging

◈ Product Description

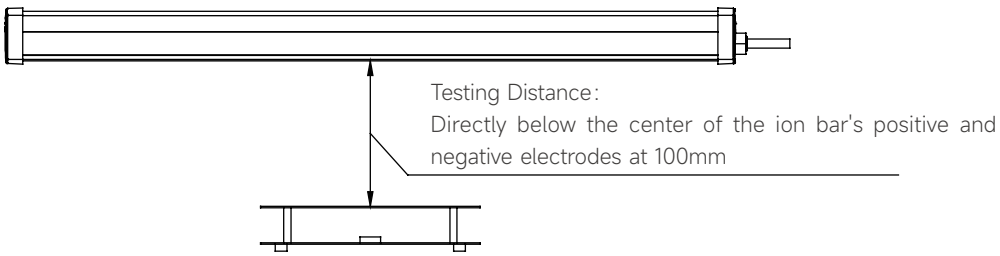
AP-DC5602 model direct current ion bar is a bar-type static elimination device developed and produced by AP&T Company, designed to eliminate static electricity on the surface of objects.

AP-DC5602 ion bar uses direct high voltage, acting on specialized emission electrodes, to ionize air molecules, producing a large number of positive and negative ions; these ions are then delivered to the surface of the object from which static electricity is to be eliminated, neutralizing positive and negative static charges, achieving the purpose of efficiently and reliably eliminating static electricity.

High Efficiency Static Removal

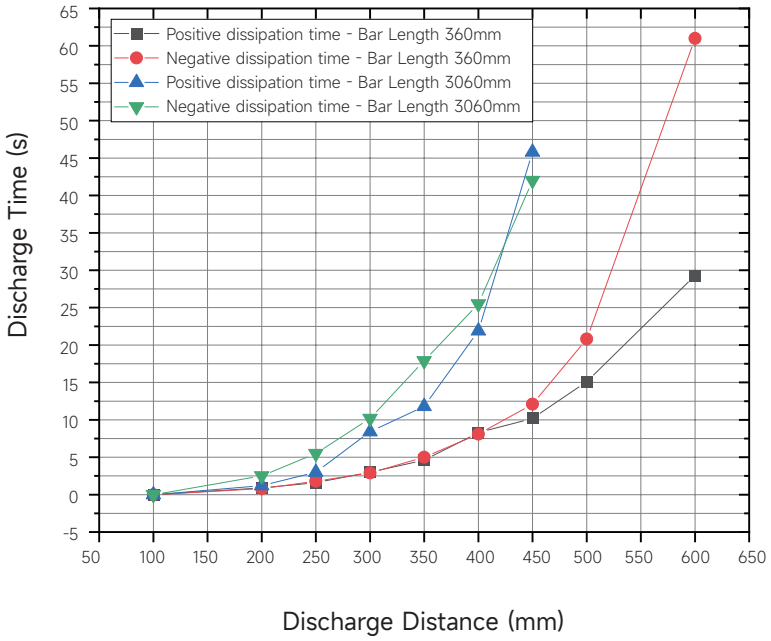
Stay away from static troubles, providing you with a clean production environment

Test diagram shown below:



Test standard: ANSI/ESD.STM3.1, SJ/T 11446—2013
Test instrument: Trek 156A static tester
Test voltage: ±1000V → ±100V Attenuation
Test environment: Humidity 50±5%; Temperature 23±3°C

Test data shown below(Length of high-voltage cable: 2500mm):



Features

Safe / Easy to use / Durable

Unique structural design

Bar-type, horizontally placed static eliminator with a specially made strip slot on the back of the bar body, allowing movable mounting bolts.

Strong discharge ability

Suitable for objects with medium to high speed movement and high friction intensity for static elimination.

Double row needle discharge structure design

Utilizes DC static elimination technology for excellent performance.

CE certification

It can effectively prevent the external electromagnetic interference from affecting the normal operation of the ion bar. This is a static electricity eliminator with high safety and high reliability.

Product Specifications

Product Details / Product Size / Product Parameter

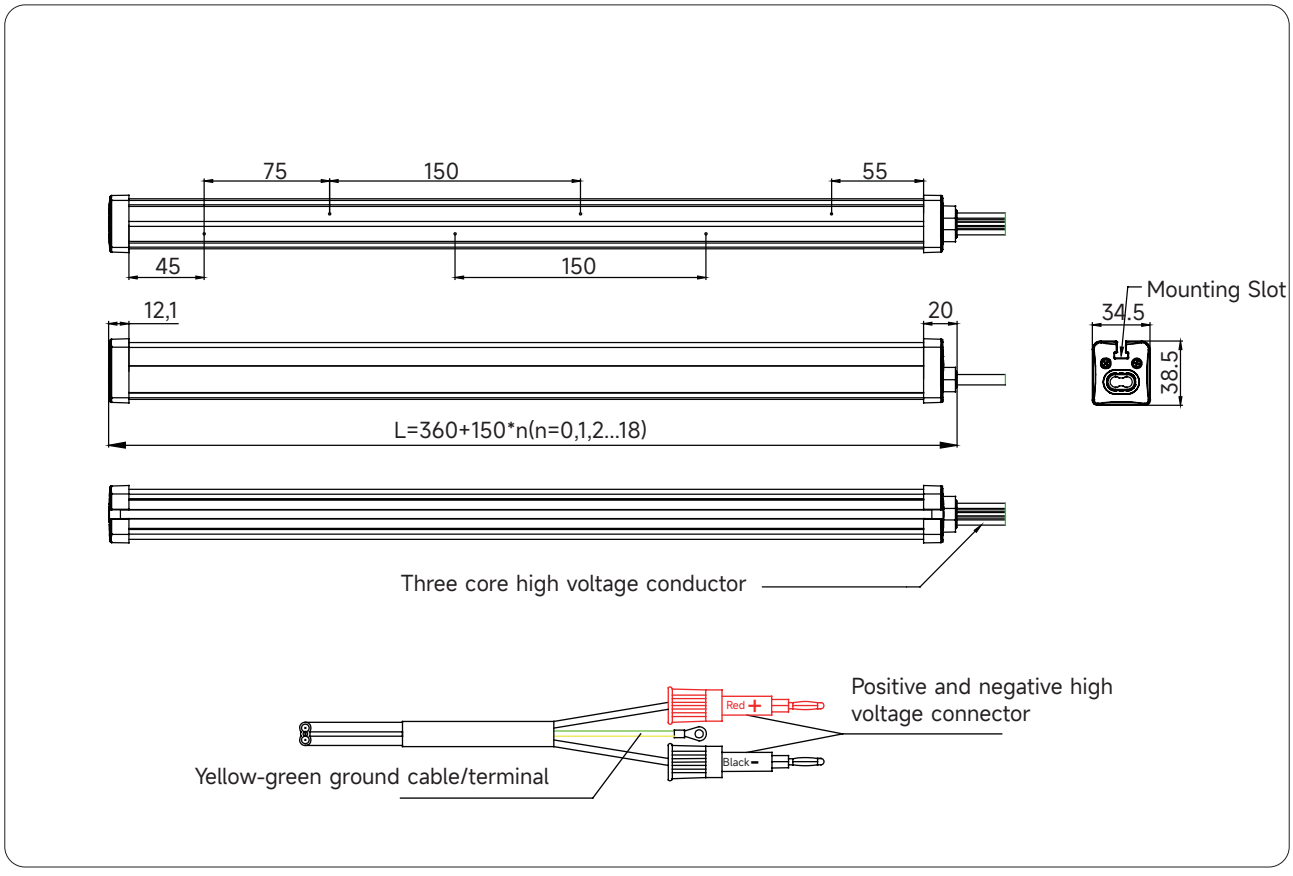
◈ Product Details

Front

Back

◈ Product Size

Unit: mm

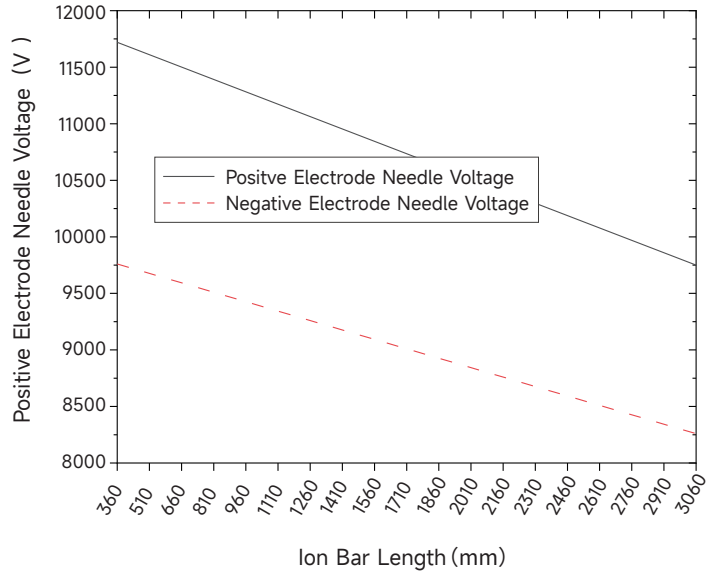


Product outline structure dimension drawing

Product Specifications

Product Details / Product Size / Product Parameter

◈ Discharge Electrode Voltage Characteristics



◈ Product Parameter

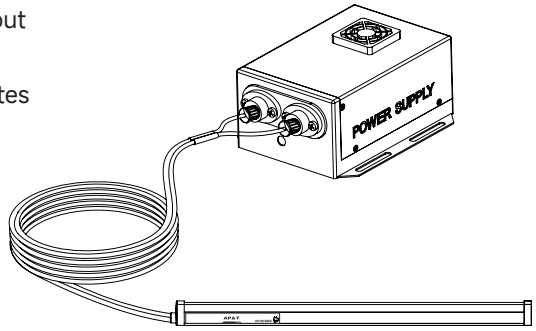
Model	AP-DC5602
Working voltage	DC±10000-12000V
Power	< 10W
Ion emission	DC
Emitter electrode	Tungsten
Discharge structure	No coupling electrical contact
Discharge range	L*H: （Bar length-135mm）*100mm
Installation distance	30 → 100mm
Discharge speed	≤ 2.0s（Discharge distance 100mm）
Ion balance	-50V → +50V（AVG value）
Working temperature	0°C -50°C
Working humidity	< 70%
Dimensions	L*W*H: {360,510,660 → 3060mm}*34.5mm*38.5mm
Bar material	Flame retardant PVC, AL
Packaging accessories	M5×20 Hexagonal mounting bolts / Nuts
Power supply	AP-DY7211/AP-DY7221
High voltage vable length	2.5m（Customizable up to 5m）
Warranty	1 Year
Certification	CE

Use of the product

Installation Position / Packaging Accessories

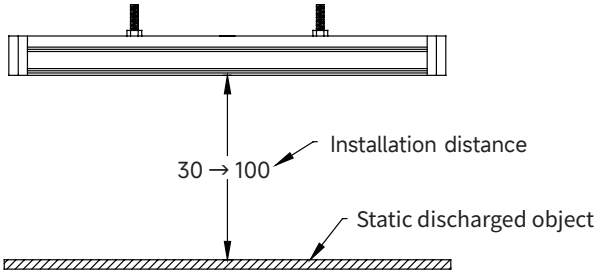
◈ Installation and Use Guide

- ➤ Select the optimal position for static elimination, and securely install the bar and the corresponding high-voltage power supply.
- ➤ Connect the ground terminal of the bar to the ground stud on the high-voltage power supply.
- ➤ Insert the positive and negative high-voltage plugs of the bar into the corresponding positive and negative high-voltage output seats of the high-voltage power supply.
- ➤ Turn on the power switch, the switch indicator light on indicates the power supply is working, and the electrode needles will generate positive and negative air ions to neutralize the static electricity on the surface of the object.



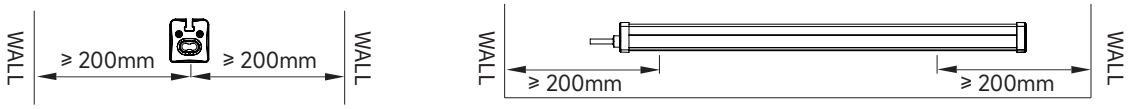
◈ Product Installation Position

- ➤ When using the ion bar, it should be placed within the static elimination working area (approximately 30-100mm from the surface of the object being de-staticized is optimal), and the installation angle should be perpendicular to the charged body surface.



- ➤ Ion bar's discharge electrodes should be at least 50mm away from metal conductors and grounded metal bodies, and the DC high-voltage power supply must be reliably connected to the ground wire with a ground resistance less than 1 ohm.
- ➤ The surface of the ion bar should not be covered with other objects.
- ➤ An installation spacing of more than 150mm is advisable for two ion bars installed side by side.

- ➤ The distance from walls and other obstacles should be more than 200mm.



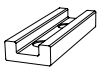
⚠ Trouble shooting solutions

NO.	Problems	Reasons	Solutions
1	The electrostatic removal performance decreased obviously	Discharge needle is polluted and damaged	Clean or replace the discharge needle
		Ion bar positioning is incorrect	onfirm the best installation location
2	The electrostatic removal performance decreased obviously	There are conductors or other ion bar around	Remove (moving) conductors or other ion bar
		The ion bar/DC high voltage power supply is improperly grounded or not grounded	Check the electrical grounding of the power supply and plant equipment
3	Unable to eliminate static	High-voltage connecting wire is damaged	Return to factory for maintenance
		Ion bar insulation is damaged	
		The DC high voltage power supply is damaged	Return to check the electrical grounding of the power supply and plant equipment, Return to factory for maintenance
4	Product burnout	Ion bar insulation is damaged	Return to factory for maintenance

⚠ Safety warning

- Please read the instruction manual carefully before installing and using this equipment.
- The whole set of equipment must be reliably grounded during use, otherwise it is easy to cause abnormality or even damage to the ion bar.
- Do not use this equipment in environment where humidity is > 70%.
- It is strictly forbidden to use this equipment in flammable and explosive environments.
- Unauthorized disassembly of the product is strictly prohibited, internal maintenance and repair must be performed by professionals.
- The product's laminar gas must be dry and clean air or nitrogen, otherwise an abnormality may occur and cause electric shock or fire.
- Power must be turned off during inspecting or replacing the product, otherwise it may cause electric shock or fire.
- The product is ventilated with dry and clean air or nitrogen which will work abnormally or be damaged if the gas source contains water or grease.
- The product is specially designed to eliminate static electricity. It is strictly forbidden to use it for other purposes. Any abnormal use may cause machine failure, electric shock, fire and other accidents.
- Its strictly forbidden to touch the electrode needles when power is on, otherwise it is easy to cause malfunctions and electric shock accidents.
- The electrode needle is a sharp metal object, please use it with care.
- Please check the specifications of the power supply before powering on the product. Any power supply that does not meet the specifications will cause damage to the product.
- Please check the product power cord regularly and replace it immediately if it is damaged. Otherwise it is easy to cause problems such as electric leakage, poor communication, and abnormal operation.

◈ Packaging Accessories

Name	Picture	Part No.	Specification	Quantity
Galvanized hex bolts		1SL00520X	M5*20 Mounting bolts	2 mounting bolts within 1m ion bar; Add one mounting bolt/nut for every 0.5m increase in ion bar length
Hex nuts		1LML05000	M5	2 mounting nuts within 1m ion bar; Add one mounting nut for every 0.5m increase in ion bar length
Optional accessories				
T-slider		AP8679002	30*7.8*7.5 2-M4 screw mounting hole (not through)	Optional
U-slider		AP8679004	30*10.5*4.5 2-Φ4.2	Optional
Galvanized hexagon bolt		1SL00420X	M4*20	Optional
Stainless steel cross large flat head screws		1DDA0408U	M4*8	Optional

⚠ Maintenance

➤ 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, discharge socket, and metal discharge 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 products 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.

➤ If the ion bar shows signs of burnout, stop using it and have it checked and repaired by professional maintenance personnel. After the electrical performance indicators are tested to be normal, the ion bar can be used again.

⚠ After-sales service

- AP-DC5602 has undergone rigorous testing and aging treatment before ex-work. Its performance has completely reached the relevant indicators marked in the usage instruction.
- 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.

- The discharge electrode is a consumable part and is not covered by the warranty. Customers will be charged for replacement during maintenance.
- 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®

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SPECIALITY CREATES VALUE

Professional electrostatic intelligent monitoring/analysis
and elimination solution provider

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