

中域高速型靜電消除器 MESD-FA Medium Range Ionizer



▶ MESD-FA04
離子平衡
Ion Balance $\pm 15V$

▶ MESD-FA05A
離子平衡
Ion Balance $\pm 30V$

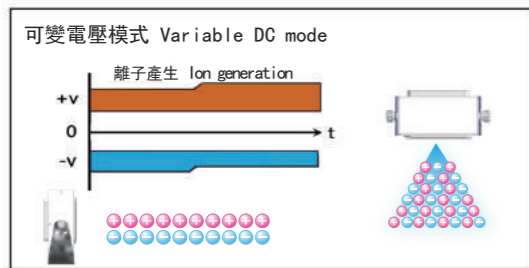
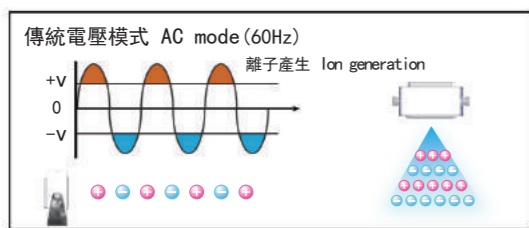
▶ MESD-FA05E
離子平衡
Ion Balance $\pm 10V$



可變電壓直流模式 Variable DC Mode

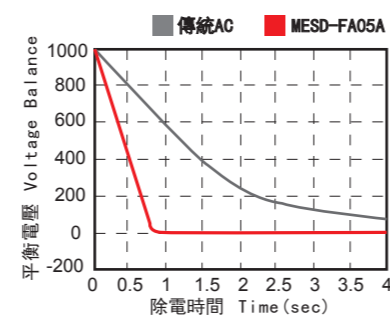
在單電極針上分別施加正或負高壓，有效提升電離子生成量，實現高速靜電消除效果，與傳統AC相比可更有效提高離子生成。

Inflicting +/- voltage on the electrode probe individually, efficiently increasing the amount of ions generated, achieve high-speed static elimination, compared with the conventional AC mode generation can be more effectively improved.



*內部自我偵測，調整正負離子電壓水平
*Internal Self-detection, Adjust ion positive and negative balance.

除電比較圖 Static Elimination Performance



測試條件 距離 30cm
 $\pm 1000V$ 到 $\pm 100V$ 消除靜電所需時間
使用150mm x 150mm CPM (20pF)
Test Conditions Distance 30cm
Ion static elimination time: From voltage $\pm 1000V$ to $\pm 100V$
Use 150mm x 150mm (20pF) CPM device

快速拔針機構設計 Quick Release Structure

簡易的換針方式，維護作業簡便、清潔輕鬆又便利。

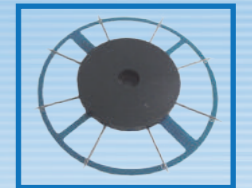
Quick release electrode probe, make it easy to maintenance and clean up.



▶ MESD-FA04
放電針 Electrode Probe



▶ MESD-FA05A
放電針 Electrode Probe



▶ MESD-FA05E
放電針 Electrode Probe

低電壓 DC24V Low Voltage

可有效避免放電所造成纜線老化與對週遭的裝置影響，建構高可靠性系統。

Which can prevent cables gradually aging by the static discharge with high reliable system.

內建控制器 Control System

一體成型的設計，可有效節省安裝空間，輕鬆應付各種應用系統。

All in one design model, save install space and suitable for any applications.

多功能顯示系統 Multi-function System

可顯示離子水平，離子平衡及風量調整。根據使用環境微調整，可提高靜電消除能力。

Multi-function display system can display ion balance, adjustable fan volume and ion balance.

Depending on the environment to adjust functions, improving the ability to eliminate static.

離子平衡顯示器 Ion Balance Status Display

長條型LED向+端亮起，代表產生的離子偏正離子居多；
長條型LED向-端亮起，代表產生的離子偏負離子居多。

When lights close to +, It means + ion is more, when lights close to -, it means - ion is more.



離子平衡設定顯示器 Ion Balance Setting Display

設定離子平衡。Ion balance setting.
當長條型LED向+端亮起，代表產生離子偏正離子居多；
當長條型LED向-端亮起，代表產生離子偏負離子居多。

When lights close to +, It means produce + ion is more, when lights close to -, it means produce - ion is more.



風量設定顯示器 Fan Volume Setting Display

設定風量大小。Fan Flow setting.
當長條型LED向+端亮起，代表風量增加；
當長條型LED向-端亮起，代表風量減少。

When lights close to +, it means fan speed is increased, when lights close to -, it means fan speed is decreased.

異常放電偵測/顯示 Abnormal Detection Display

當輸出電流異常的時候，系統會停止高壓輸出，以保護靜電消除器及使用者，並且亮起警示指示燈。

When output current is abnormal, system will stop high voltage output in order to protect user. Moreover alarm signal will be light up.

- 棒型
Bar Type
- 區域型
Area Type
- 扇型
Fan Type
- 管型
Tube Type
- 槍型
Gun Type

規格 Specifications

產品型號 Model	MESD-FA04	MESD-FA05A	MESD-FA05E
輸入電源 Input Power	DC24V±5%		
消耗電流 Current Consumption	Approximate 600 mA	Approximate 970 mA	Approximate 970 mA
出力電源 Applied Voltage	±7KV (MAX)	±6.5KV (MAX)	±2.8KV (MAX)
離子平衡 Ion Balance	±15V *	±30V *	±10V *
建議設置距離 Operating Distance	150~1000 mm	100~1500 mm	50~1000 mm
介面顯示 LED Indicator	電源 Power Status: 電源入力時綠燈亮 When power input turns on green light 異常 Alarm Show: 紅燈亮 Red light on 數位顯示器呈現 Digital LED show "E" 功能 Function: 離子平衡、離子調整、風量顯示 Ion Balance, Ion Adjustment, Fan Volume 風量顯示 Fan Volume		
異常輸出接點 Power Safety Circuit	NPN電晶體出力 NPN Transistor output (Max. 50mA)		
臭氧量 Ozone Amount	0.03 ppm 以下 Under 0.03 ppm		
最大風速 Max Wind Speed	3.2 m/s *	4.3 m/s *	4.3 m/s *
風量 Air Flow	110 CFM	137 CFM	137 CFM
使用環境溫度 Ambient Temperature	15~40°C (室內 Indoor)		
使用環境溼度 Ambient Humidity	35~65% RH (無冷凝 No condensation)		

* 量測條件 Measure Condition: 距離 Distance 300 mm

配件 Accessories

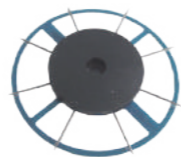
扇型標準配件 Fan Type Package Content

- ▶ 扇型電纜線 Power Cable (3 meter)
MESD-CP023



耗材選購配件 Consumable Options

- ▶ 扇型放電針組 Electrode Probe (for MESD-FA04)
MESD-EC04
- ▶ 扇型放電針組 Electrode Probe (for MESD-FA05A)
MESD-EC05A
- ▶ 扇型放電針組 Electrode Probe (for MESD-FA05E)
MESD-EC05E



電源選購配件 Power Supply Options

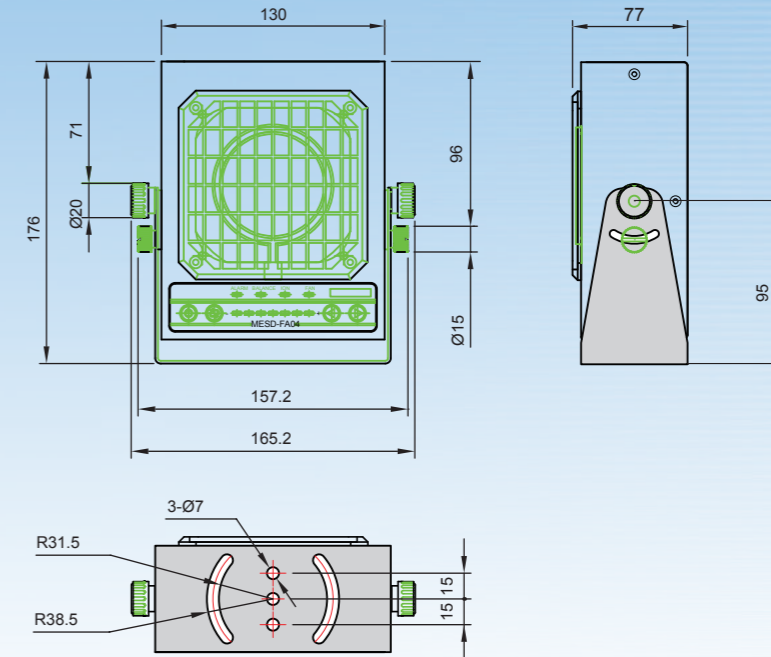
- ▶ 扇型電源供應器 Power Supply 24W (for MESD-FA04)
MESD-CP025J
- ▶ 扇型電源供應器 Power Supply 60W (for MESD-FA05A/E)
MESD-CP060J



外觀尺寸 External Dimensions

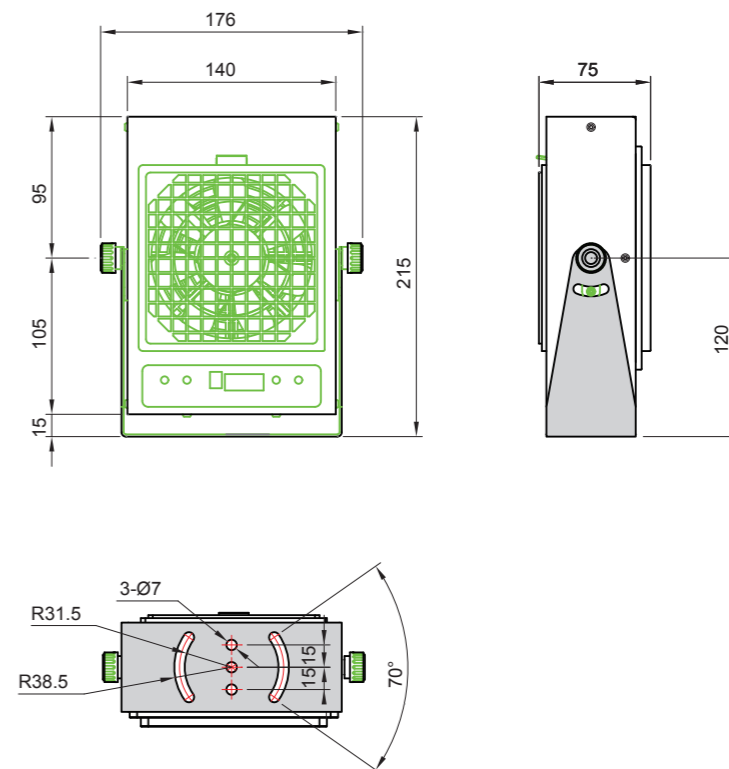
單位 Unit: mm

▶ MESD-FA04



* 有效區(出風口) Effective area: 90mm x 90mm

▶ MESD-FA05A & MESD-FA05E



* 有效區(出風口) Effective area: 110mm x 110mm

- 棒型
Bar Type
- 區域型
Area Type
- 扇型
Fan Type
- 管型
Tube Type
- 槍型
Gun Type

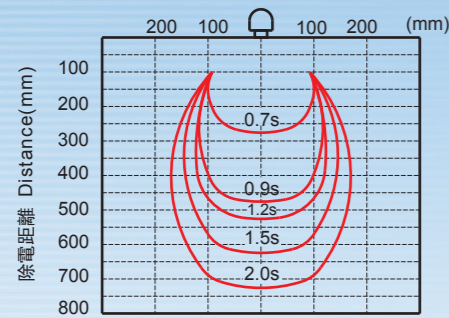
- 棒型
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- 棒型
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性能曲線圖 Static Elimination Performance

► MESD-FA04

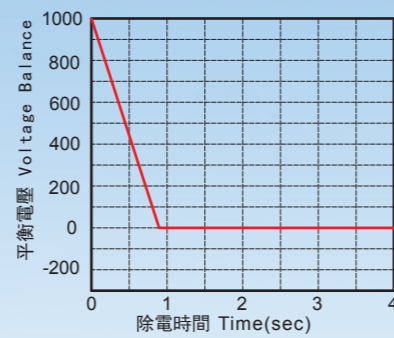
除電區域與時間(最大風速) Decay Time(Max Speed)



測試條件:
 . 電壓在±1000V到±100V範圍內的靜電消除時間
 . 使用150mm x 150mm (20pF) 平板測試儀
 . 無下降氣流

Test Conditions:
 Ion static elimination time:
 From voltage ±1000V to ±100V
 Use 150mm x 150mm (20pF) CPM device
 No downdraft

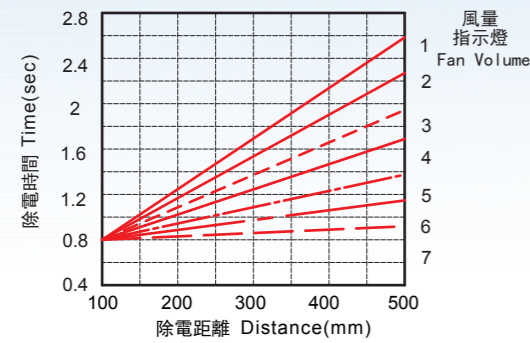
除電與平衡能力 Static Elimination and Balance



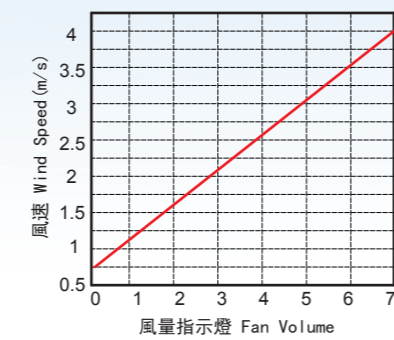
測試條件:
 . 電壓在±1000V到±100V範圍內的靜電消除時間
 . 使用150mm x 150mm (20pF) 平板測試儀
 . 無下降氣流

Test Conditions:
 Ion static elimination time:
 From voltage ±1000V to ±100V
 Use 150mm x 150mm (20pF) CPM device
 No downdraft

風量與除電關係圖 Static Elimination Diagram

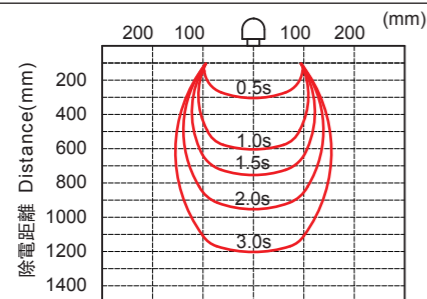


風速調整對應圖 Wind Speed Diagram



► MESD-FA05A

除電區域與時間(最大風速) Decay Time(Max Speed)

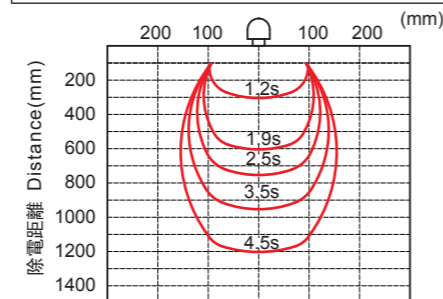


測試條件:
 . 電壓在±1000V到±100V範圍內的靜電消除時間
 . 使用150mm x 150mm (20pF) 平板測試儀
 . 無下降氣流

Test Conditions:
 Ion static elimination time:
 From voltage ±1000V to ±100V
 Use 150mm x 150mm (20pF) CPM device
 No downdraft

► MESD-FA05E

除電區域與時間(最大風速) Decay Time(Max Speed)

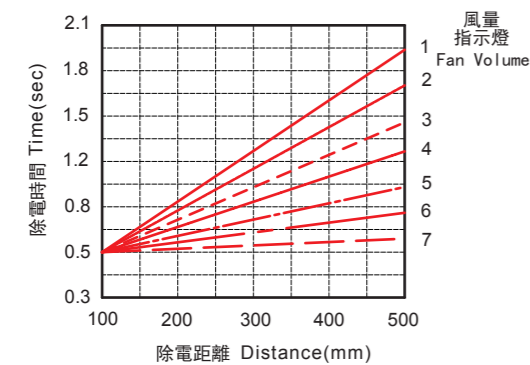


測試條件:
 . 電壓在±1000V到±100V範圍內的靜電消除時間
 . 使用150mm x 150mm (20pF) 平板測試儀
 . 無下降氣流

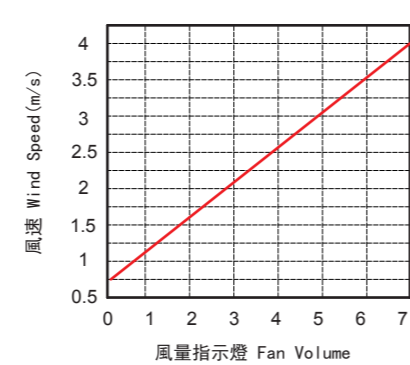
Test Conditions:
 Ion static elimination time:
 From voltage ±1000V to ±100V
 Use 150mm x 150mm (20pF) CPM device
 No downdraft

► MESD-FA05A/E

風量與除電關係圖 Static Elimination Diagram

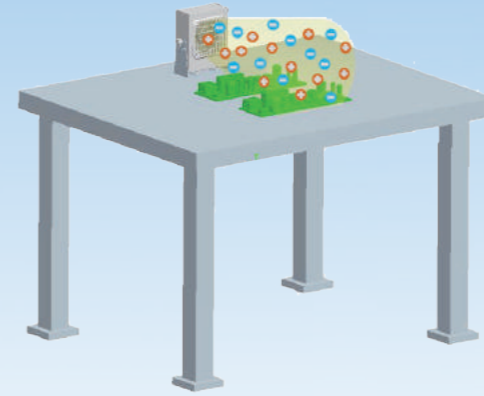


風速調整對應圖 Wind Speed Diagram

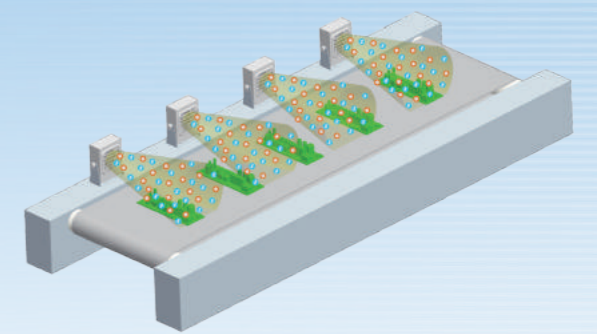


應用實例 Applications

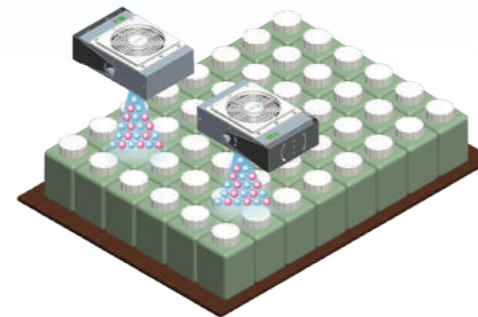
► 工作桌上產品消除靜電 In Workshop or on Working Tables



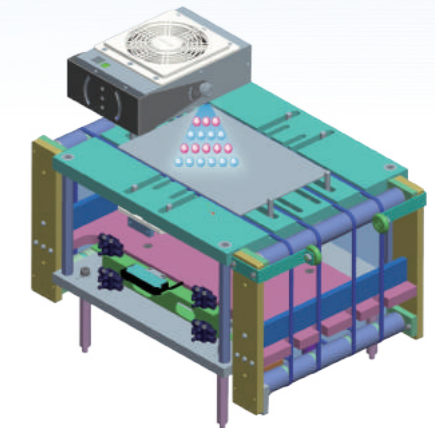
► 安裝於輸送帶機構 Conveyor Operation



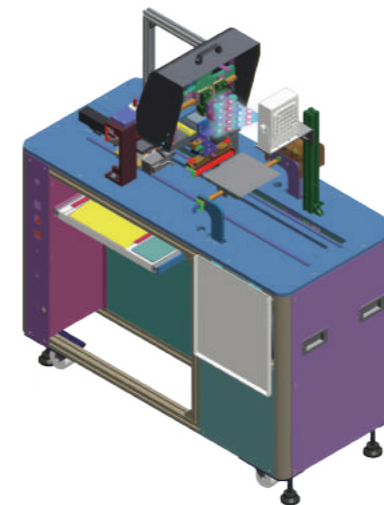
► 防止藥品充填附著異物 Container's Particle



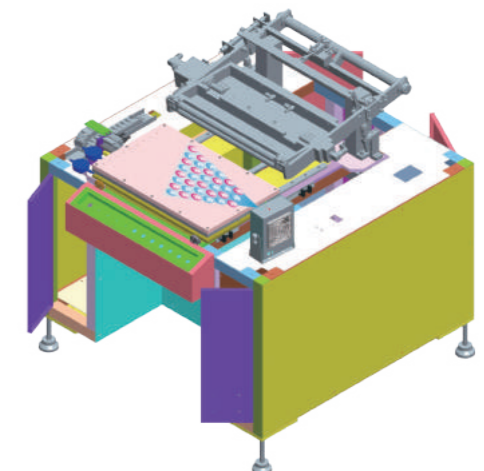
► 防止送料時髒污附著 Machine Feeding



► 防止貼合時髒污附著 Lamination / Touch Panel



► 防止撕/貼膜時髒污附著 Peeling Films



中域簡易型靜電消除器 MESD-FA Medium Range Ionizer

棒型
Bar Type

區域型
Area Type

扇型
Fan Type

管型
Tube Type

槍型
Gun Type



規格 Specifications

產品型號 Model	MESD-FA05C1 /2	MESD-FA02C1 /2
輸入電源 Input Power	AC 110V / 220V	AC 110V / 220V
消耗電流 Current Consumption	Approximate 0.25A / 0.12A	Approximate 0.9A / 0.45A
出力電源 Applied Voltage	AC ±6KV (MAX)	
離子平衡 Ion Balance	±20V *	
建議設置距離 Operating Distance	100~500 mm	
電源指示燈 Power Status	電源入力時綠燈亮 When power input turns on green light	
最大風速 Max Wind Speed	1.8 m/s (300 mm)	
風量 Air Flow	45~110 CFM	
噪音值 Noise Value	65dB (MAX)	
臭氧量 Ozone Amount	<0.03 ppm	
使用環境溫度 Ambient Temperature	15~40°C (室內 Indoor)	
使用環境溼度 Ambient Humidity	35~65% RH (無冷凝 No condensation)	

* 量測條件 Measure Condition: 距離 Distance 300mm

棒型
Bar Type

區域型
Area Type

扇型
Fan Type

管型
Tube Type

槍型
Gun Type



▶ MESD-FA05C

離子平衡
Ion Balance ±20V

▶ MESD-FA02C

離子平衡
Ion Balance ±20V

快速清針機構設計 Quick Clean Structure

簡易的清針方式，維護作業簡便、清潔輕鬆又便利。
The structure is designed for simple maintenance to clean the electrode probe more easily.

隨插即用操作簡單 Plug and Use

使用110V / 220V AC電源，無須轉換電壓，隨插即用；只需調整風量，無細部調整問題。
Plug the power cord 110V or 220V AC Volts into the Ionizer, after that please adjust the air volume and it works without the further adjustment.

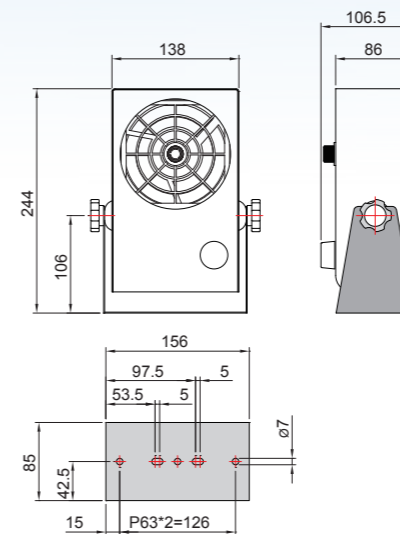
產品特色 Features

- 高精度、適用範圍廣泛。 The Ionizer with high precision can be used to various applications.
- 低噪音、靜音機構設計。 Achieve low noise feature.
- 無段速控制，輕鬆調整風量。 Adjust the air volume easily.
- 簡易操作設計，使用更方便。 Simple operation makes it easy to use.
- 快速清針機構，省時省成本。 Easy to clean the electrode probe, to reduce the cost and save time.

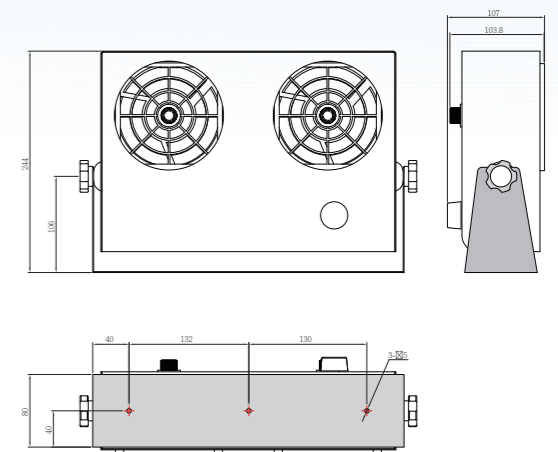
外觀尺寸 External Dimensions

單位 Unit: mm

▶ MESD-FA05C



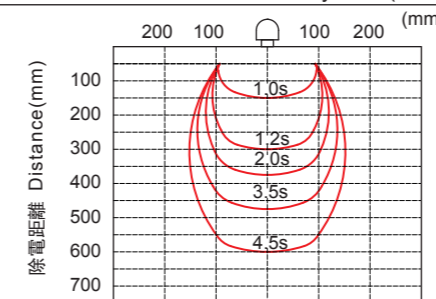
▶ MESD-FA02C



* 有效區(出風口) Effective area: ø120mm

性能曲線圖 Static Elimination Performance

除電區域與時間(最大風速) Decay Time(Max Speed)



測試條件:
· 電壓在±1000V到±100V範圍內的靜電消除時間
· 使用150mm x 150mm (20pF) 平板測試儀
· 無下降氣流

Test Conditions:
Ion static elimination time:
From voltage ±1000V to ±100V
Use 150mm x 150mm (20pF) CPM device
No downdraft

風速調整對應圖 Wind Speed Diagram

