

KGNIonizer

高性能靜電消除裝置



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)



您一定要知道的 靜電

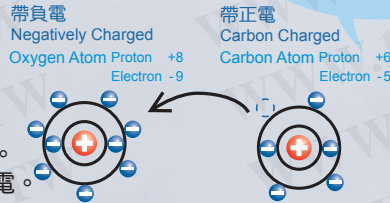
Electrostatic – One thing you need to know.

靜電小常識 About Electrostatic

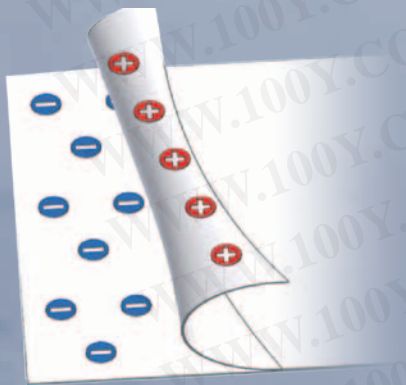
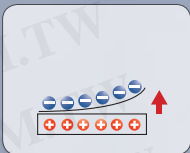
靜電產生 Static electricity

電子會因摩擦、接觸、分離而移動。
 當原子失去外層電子時，質子數多於電子數，原子帶正電。
 當原子獲得外來電子時，質子數少於電子數，則原子帶負電。

An electron can be moved by friction, contact or separation. By applying excess electrons, the atom becomes negatively charged and by removing electrons, it becomes positively charged.



原因 1 剝離帶電 Energizing by Delaminating

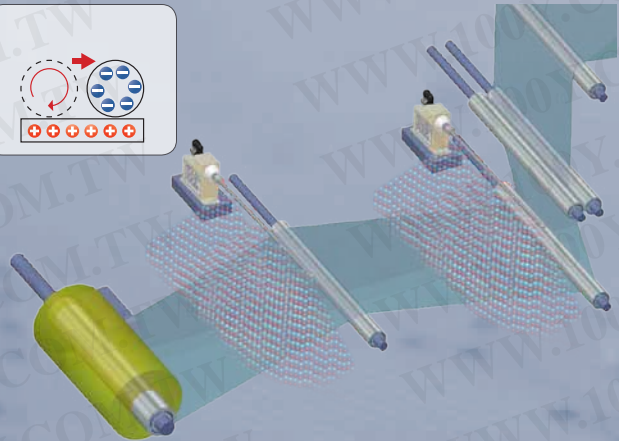
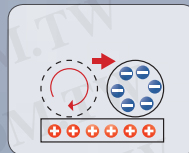


現象：保護膜剝離產生靜電，易吸引灰塵附著，造成不良率提高。
 方案：使用 KGN 風扇型

Effect: Electrostatic generated due to the delaminating of protection film has resulted in the building of dust so as to cause higher defect rates.

Solution: Use KGN Fan Type.

原因 2 轉動帶電 Energizing by Turning

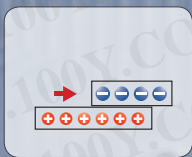


現象：薄膜滾動產生靜電，易使薄膜偏移，造成不良率提高。
 方案：使用 KGN 氣壓吹氣型

Effect: Electrostatic generated due to film rolling has forced the film to deviate and cause higher defect rates.

Solution: Use KGN Blow Type.

原因 3 摩擦帶電 Energizing by Friction

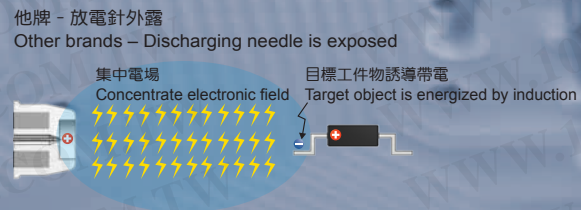
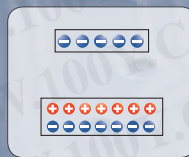


現象：電路機板鑽孔，產生印前屑吸附於工件上，不易清除。
 方案：使用氣壓吹氣型

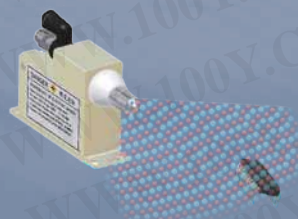
Effect: Drilling on the circuit board has forced the printing board to attach to the workpiece and is difficult to remove.

Solution: Use KGN Blow Type.

原因 4 誘導帶電 Energizing by Induction



KGN 全系列 - 放電針不會影響目標工件物
 All series – the discharging needle will not affect the target object



KGN 噴嘴有電場屏蔽功能
 The nozzle has an electric field shielding function

現象：放電針外露容易形成集中電場，造成工作物件被破壞。
 方案：使用氣壓吹氣型

Effect: Exposed discharging needle easily forms concentrated electric fields, causing damage to the work object.

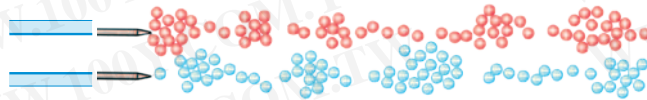
Solution: Use KGN Blow Type.

KG N 專利高頻 AC High-Frequency AC

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傳統DC Traditional DC

放電針電壓
Discharging needle voltage

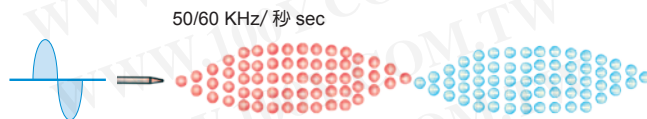


單一放電針只產生單一離子，易使正或負離子針尖消耗不一，造成離子不平衡及除電效果不佳。

Uni-polar discharging pins generate uni-polar ions and lead to imbalanced consumption of positive or negative ion pins. This results in imbalanced amounts of positive or negative ions and poorer static elimination.

傳統弦波AC Traditional Sine wave AC

放電針電壓
Discharging needle voltage



一般 50/60Hz 交流放電週期時間較大，無法綿密產生正、負離子，形成區塊性離子群，降低除靜電效果。

Standard alternating current (in 50/60 Hz frequency) cannot generate positive/negative ions in high density as it discharges in greater amplitude. Ions generated in separated blocks result in less satisfactory static elimination effects.

週期可變方波AC Variable cycle square wave AC

放電針電壓
Discharging needle voltage



雖產生的離子較傳統 AC 多，但交流放電週期時間同樣較大，無法綿密產生正、負離子，形成區塊性離子群，降低除靜電效果。

Although there are more generated ions than the traditional AC, the alternating current cannot generate positive/negative ions in high density as it discharges in greater amplitude. Ions generated in separated blocks result in less satisfactory static elimination effects.

KG N 高頻AC High-Frequency AC

放電針電壓
Discharging needle voltage



交流放電以每秒 72KHz 的週期時間短，可快速產生綿密正負離子，形成穩定的離子平衡；凹凸、有縫隙工件及快速移動工件亦能有效消除靜電。

Unlike traditional AC discharge, the High-Frequency AC discharges in a frequency of 72,000Hz and generates high-density ions of high speed and balance. This eliminates static for fast moving objects even with rough and aperture-rich surfaces.

除電效能
比較表
Summary of
elimination
effects





工作條件 Discharging Type	放電形式 Object Type	傳統 DC Traditional DC	傳統 AC Traditional AC	高頻 High-frequency
凹凸、有縫隙工件 Rough and aperture-rich surfaces		差 Poor	尚可 Fair	優良 Excellent
快速移動工件物 Fast moving		尚可 Fair	差 Poor	優良 Excellent

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KIF-1000N/T 2000N/T

風扇型 Fan Type

適用於大面積快速除靜電需求的場合
Suitable for occasions in which quick static elimination for large areas is needed






-  模組化易維護，大幅縮減維護成本
Modularized design for easy maintenance; vastly reduces maintenance cost
-  上視面板顯示，多角度監控狀態
Top-view panel display, multi-angle status monitoring
-  離子放電暫停，有效延長清針週期
Ion discharging suspension, effectively extending the pin cleaning cycle period
-  快速清針機構，縮短清針時間
Fast pin cleaning mechanism, shortening pin cleaning time
-  63mm 薄形化設計，輕巧省空間
Compact design, light and space-saving

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KIB-025

氣壓吹氣型 Blow Type

適用設備搭載 / 安裝於空間受限的場合
Suitable for where the equipment is carried/installed in a place with limited space

-  不會形成集中電場，可以接近被除電物至1mm的距離
Does not form concentrated electric fields; the nozzle could be as close as 1mm to the targeted object
-  電離子可經由導電性管或金屬管移送，克服設備內空間狹窄的困擾
The ions could be transferred through a conductive tube or metal tube, overcoming the problem of narrow spaces in the equipment
-  用低電壓電源即可使用，無高電壓配線的危險性
Could be used with low-voltage power supplies; there's no risk for high voltage wiring.
-  多樣性的噴嘴配件供選擇，可對應各種靜電消除需求
Multiple choices for nozzle accessory to apply various enquiry
-  優越的離子平衡，確保除靜電效能
Due to good ion balance, removal of static electricity is always possible

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KIS-400

空間除電型 Free Space

適用於特定空間內的除靜電需求
Suitable for static elimination needs in specific spaces

⊕⊖ 優越的離子平衡，確保除靜電效能
▲ Due to good ion balance, removal of static electricity is always possible

⊕⊖
⊖⊕ 多樣性的噴嘴配件供選擇，可對應各種靜電消除需求
Multiple choices for nozzle accessory to apply various enquiry

👁️ 安全監控十分簡便
Security monitoring; very simple

💰 節省更新成本、維修費用
Save on updating costs and maintenance fees

🪶 鋁質外殼輕巧設計
Aluminum case is lightweight



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KIG-01

槍型 Air Gun Type

適用於包裝前的最後除塵、除靜電
適用於工作桌及生產線上隨機性除塵、除靜電需求
Suitable for final dust and static removal before packaging
Suitable for random dust and static removal needs on work desks or production lines

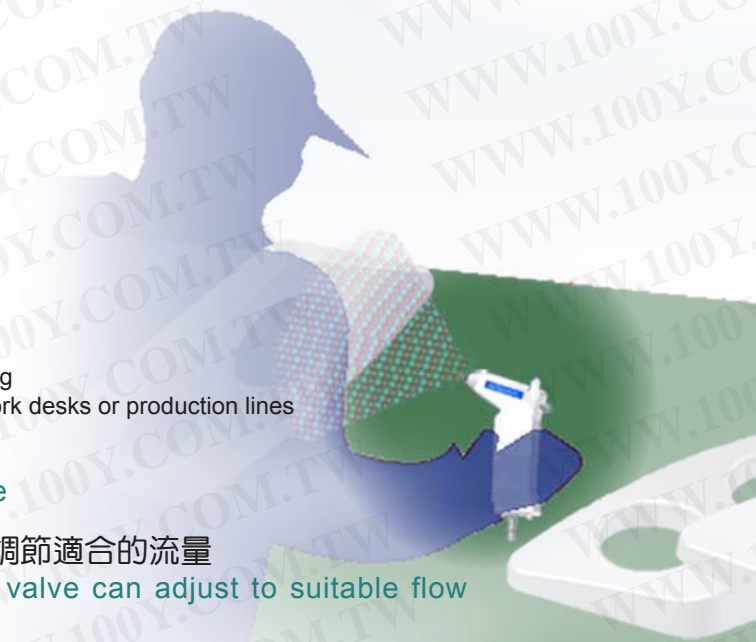
🪶 輕巧設計，降低手部疲勞
Lightweight design reduces hand fatigue

↻ 配備氣壓流量調節閥，可依使用需求調節適合的流量
Equipped with an airflow adjustment valve can adjust to suitable flow according to usage requirements

⊕ 安全的設計，不須危險的高電壓引線，也不須要額外的控制器
Safe design does not require the dangerous high voltage wiring and does not require additional controllers

⊕⊖ 優越的離子平衡，確保除靜電效能
▲ Due to good ion balance, removal of static electricity is always possible

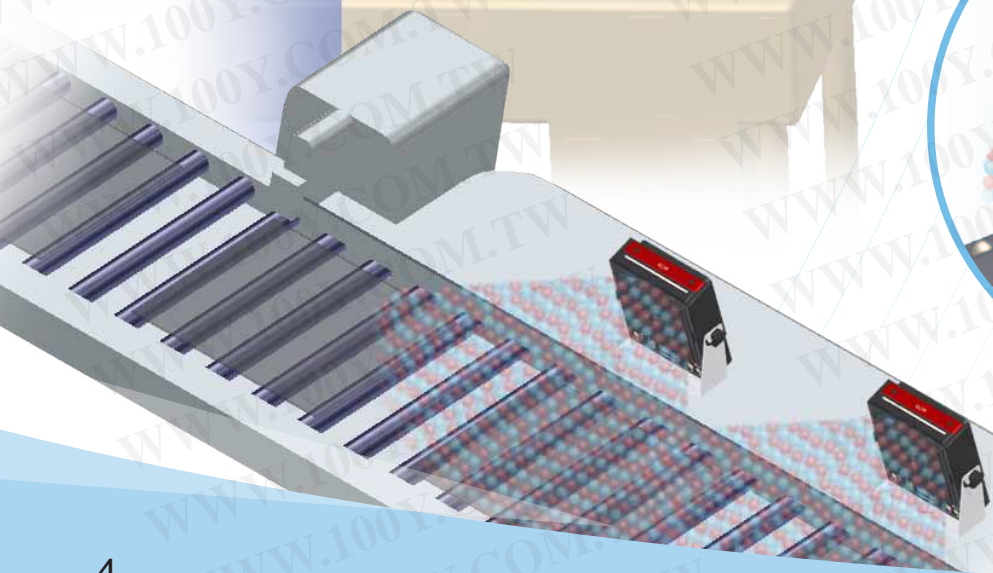
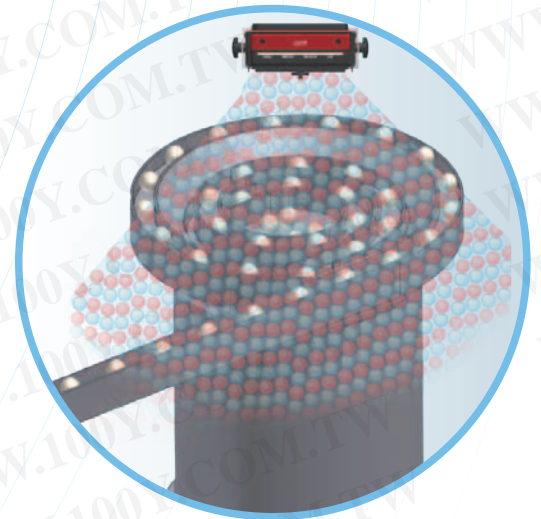
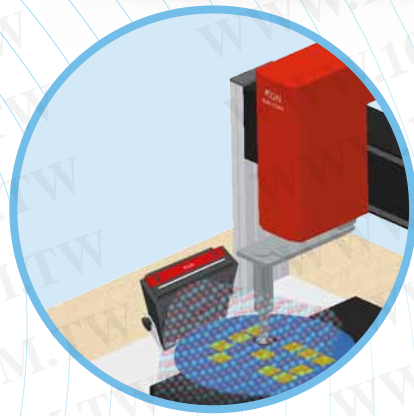
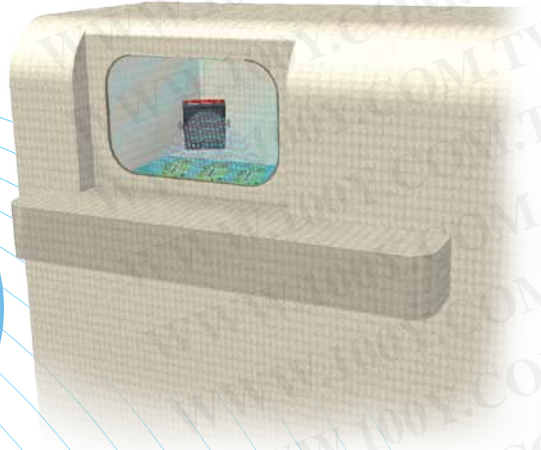
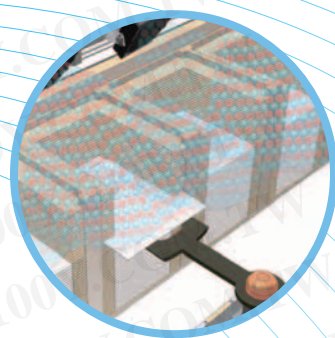
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KIF-1000N/T KIF-2000N/T

風扇型 Fan Type



特長 Features



模組化易維護 Modularized design for easy maintenance

利用模組設計，大幅縮減維護成本及回復運轉的重置時間，不論何地皆可輕鬆完成。

Leveraging modular design to significantly reduce maintenance cost and recovery time.

風扇模組

Fan Module

型號 Part Number	適用機型 For Model
KIF-RF1	KIF-1000N
KIF-RF2	KIF-1000T
KIF-RF3	KIF-2000N
KIF-RF4	KIF-2000T



上視面板顯示 Display on top of device frame

放電模組

Discharging module

型號 Part Number	適用機型 For Model
KIF-RH1	KIF-1000N
KIF-RH2	KIF-1000T
KIF-RH3	KIF-2000N
KIF-RH4	KIF-2000T

RUN-供電待機中	Power on and ready
RUN-正常運轉中	Running
HV PAUSE-離子暫停	Ion discharging suspended
FAN ERR.-異常警示	Error warning
CLEAN-清針指示	Pin cleaning is required

正面面板及機台上方亦可顯示運轉狀態，不論放置於桌面或設備內皆可清楚得知使用狀態。

Operation status display can be located at the front panel or on top of the device frame. Operation status can be easily monitored when either on the desktop or inside other equipment.



鋁合金機殼

Aluminum alloy frame

陽極表面處理，不造成二次污染。

Anode surface treatment without secondary pollution.



離子放電暫停 Ion discharging suspension

驅動電路模組 可有效延長放電針清潔週期

Circuit Module Panel display status will also effectively extend cleaning time for discharging pins.

型號 Part Number	適用機型 For Model
KIF-RD1	ALL



快速清針機構 Fast pin cleaning mechanism

快速清針模組

Fast pin cleaning module

型號 Part Number	適用機型 For Model
KIF-RS1	KIF-1000N/T
KIF-RS2	KIF-2000N/T



四刷毛設計，快速去除針尖結晶。
Four-brush design for fast removal of crystals accumulated at pin tips.

★ 建議二週清潔一次
Do pin cleaning every two weeks for best performance.

SUS304 固定架

SUS304 Mounting kit

堅固耐用，無銹蝕、掉漆等問題。

Robust design free of rust and paint spalling.

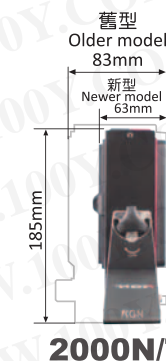
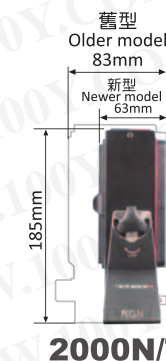


薄形輕巧省空間 Compact and space saving

與舊型比較 Compare with older models	重量 Weight	體積 Volume
KIF-1000N/T	↓ 35%	↓ 17%
KIF-2000N/T	↓ 40%	↓ 24%

輕巧機體，讓空間利用更加靈活。

Compact design for flexible space utilization.



靜電消除裝置性能規格表 Specifications

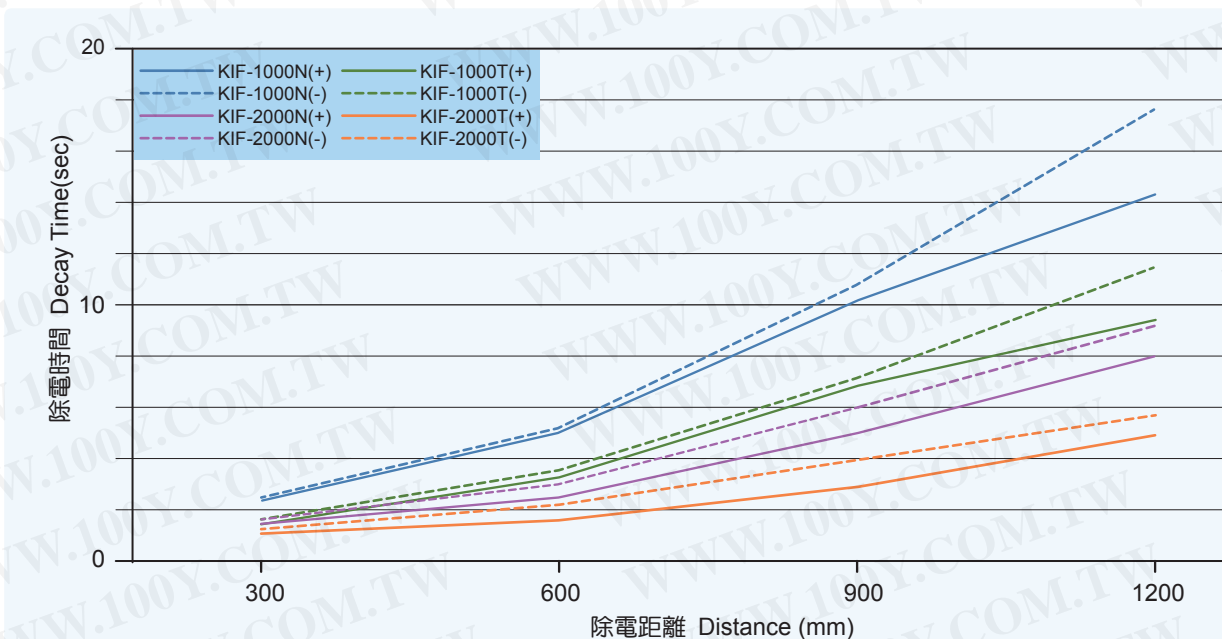
		KIF-1000N	KIF-2000N	KIF-1000T	KIF-2000T
離子產生方式	Ion Generation	電暈放電 Corona discharge			
放電針電壓施加方式	Voltage at discharging pin	高頻AC High-frequency AC			
靜電消除時間* (由±1000V至±100V)	Static elimination time* (±1000V~±100V)	約2.5秒(或以下) 2.5 sec (Around or less)	約1.5秒(或以下) 1.5 sec (Around or less)	約1.5秒(或以下) 1.5 sec (Around or less)	約1秒(或以下) 1.0 sec (Around or less)
離子平衡	Ion balancing	±15V		±5V	
風量	Air volume (M ³ /min)	22~45 CFM (0.62~1.28)	45~108 CFM (1.28~3.06)	26~60 CFM (0.74~1.70)	64~150 CFM (1.82~4.26)
臭氧量(150mm處)	Ozone volume (within 150 mm)	0.007ppm			
放電暫停控制	Control for discharging suspension	--		電壓入力時暫停 (DC10V~30V) By power input suspension (DC10V~30V)	
警報輸出	Warning output	出力接點信號 NC/NO面板切換 (50mA) Signaling at output contact, NC/NO panel switch (50mA)			
環境溫度	Ambient temperature	0~40°C (室內 indoor)			
相對濕度	Relative humidity	35%~75% · 無凝結 35%~75% · non-condensing			
入力電源	Power input	DC24V ±5%			
消耗電流	Current consumption	220mA	410mA	370mA	470mA
外型尺寸W x H x D	Dimension W x H x D	116 x 142 x 63(mm)	142 x 173 x 63(mm)	116 x 142 x 63(mm)	142 x 173 x 63(mm)
重量(不含固定座)	Weight (Mounting excluded)	469(g)	675(g)	484(g)	690(g)
本體保固	Warranty (Accessories excluded)	二年 2 Yr			
標準配件	Accessories	本體固定座 I/O連接埠端子(KIF-OC1) 接地線組(2M) 安全濾網 操作手冊		Mounting kit I/O Connector(KIF-OC1) Ground cable(2M) Safety Filter Instruction manual	

*依最大的空氣速率測量，位於空氣出口中心距離風扇的正表面300mm處，所得之結果。

* Measured with maximum air speed and at a location centered in the air output and 300mm away from the fan.

除電時間 Decay Time

備註：1. 靜電消除時間：由±1000V降至±100V所需之時間。 Note: 1. Static elimination time: ±1000V~±100V.
2. 測試過程未安裝濾網。 2. Dismount the filter.
3. 測試數據依本社測試條件所得實測值。 3. The decay time data is measured by in-house test standards.

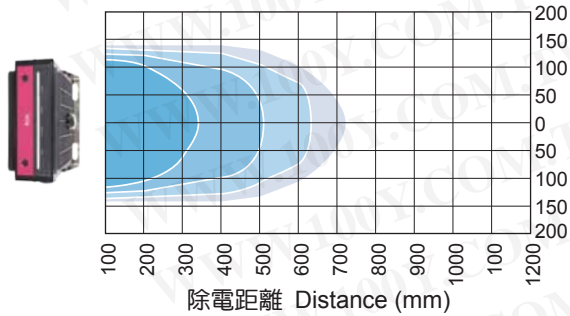


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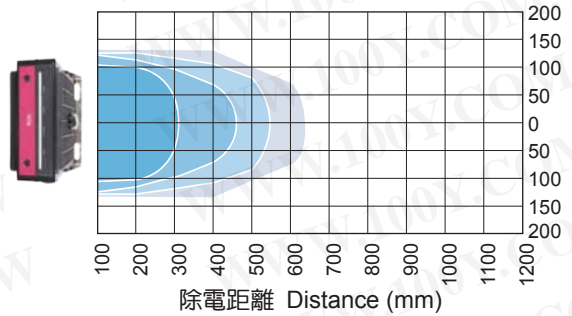
KIF-1000N

正電除電範圍 (+)Decay Range



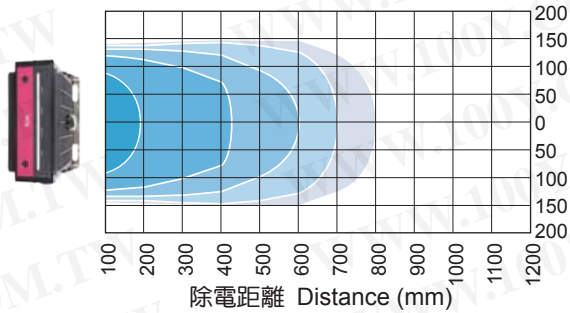
0~2sec 2~3sec 3~4sec 4~5sec

負電除電範圍 (-)Decay Range



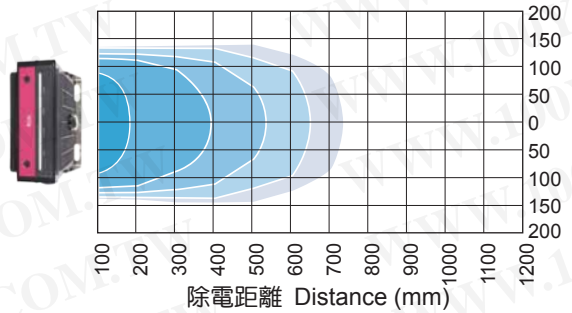
KIF-1000T

正電除電範圍 (+)Decay Range



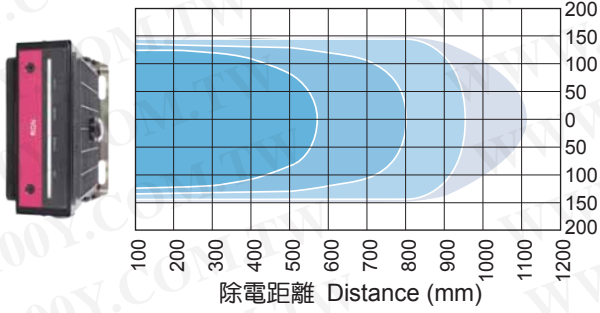
0~1sec 1~2sec 2~3sec 3~4sec 4~5sec

負電除電範圍 (-)Decay Range



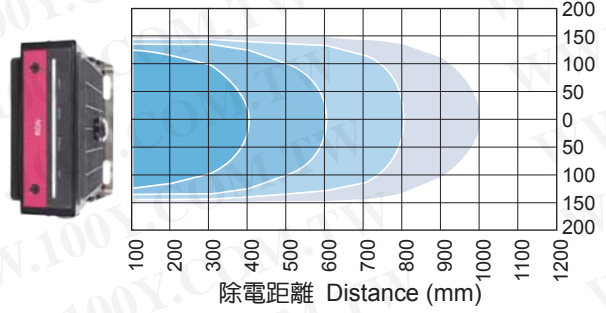
KIF-2000N

正電除電範圍 (+)Decay Range



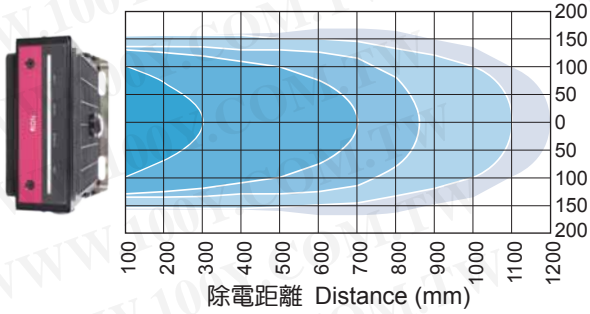
0~2sec 2~3sec 3~4sec 4~5sec

負電除電範圍 (-)Decay Range



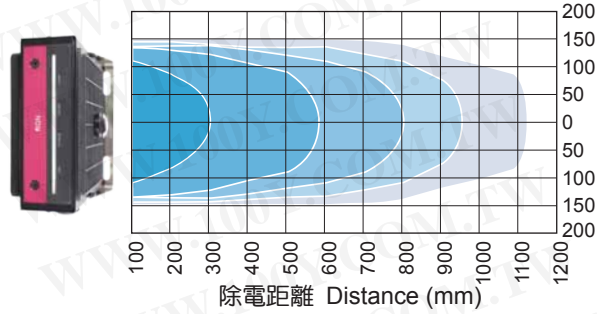
KIF-2000T

正電除電範圍 (+)Decay Range

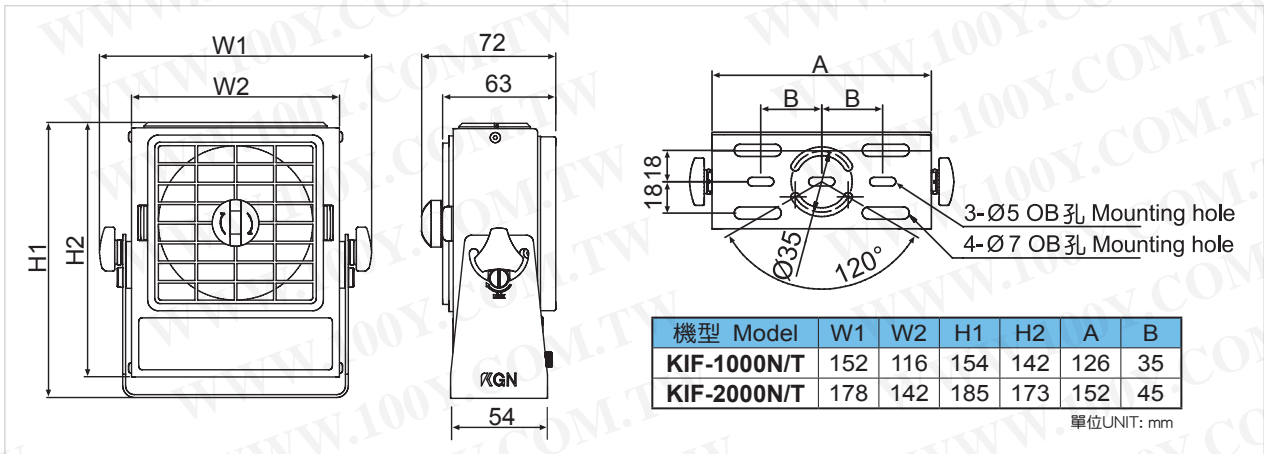


0~1sec 1~2sec 2~3sec 3~4sec 4~5sec

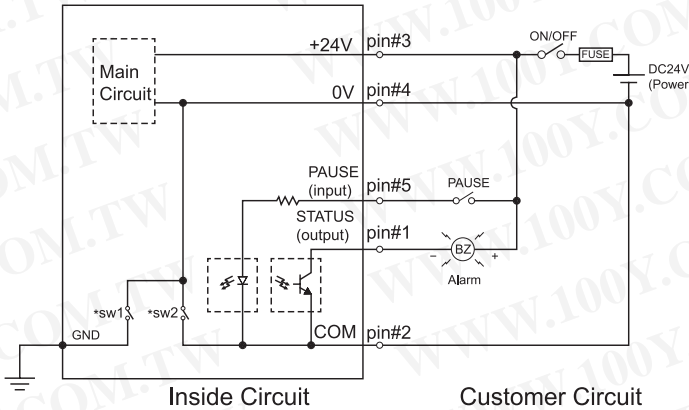
負電除電範圍 (-)Decay Range



外型尺寸圖 Dimensions (單位UNIT: mm)



配線說明 Description of Wiring



- ★ 外部控制ON/OFF，請由入力電源(+DC24V)端接線
- ★ ON/OFF of the power to the ionizer at the input side (+DC24V)

電源及警告輸出線色說明(選購品) Power and alarm output wire color description (Optional)

- [白 White] : 狀態信號輸出點 Status output
- [黑 Black] : 信號共同端子點 COM
- [紅 Red] : 電源24V入力點 Power DC+24V
- [綠 Green] : 電源0V入力點 Power GND(0V)

本體說明 Main body description

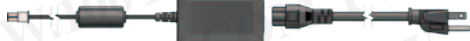
- #4 #3
- #2 #1
- 電源入力插座 Power Input Socket
- 1 2 3 4 5
- I/O 連接插座 I/O Connection Socket
- pin#1 狀態信號輸出點 Status output
- pin#2 信號共同端子點 COM (信號 0V 點) (Signal 0V point)
- pin#3 電源 24V 入力點 Power DC+24V
- pin#4 電源 0V 入力點 Power GND(0V)
- pin#5 暫停信號入力點 Pause IN(10~30V)

信號切換 Signal Switching (置於驅動電路模組後方) (Mount behind the Drive Circuit Module)

開關 Switch	說明 Description	預設值 Default Value
1 : sw1	選擇電源 0V 與接地端子導通或隔離 Select 0V power for connecting with or isolating from the Grounding Terminal.	ON- 導通 Connection
2 : sw2	選擇電源 0V 與接點 COM 導通或隔離 Select 0V power for connecting with or isolating from the Connection COM.	OFF- 隔離 Isolating

選購配件 Optional Accessories (單位UNIT: mm)

- 電源輸入轉換器
Power input adapter
KIC-03 (AC 100 ~ 240V)



- I/O連接埠端子
I/O connector
KIF-0C1



面板功能 Function



N 型
N Series

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 胜特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

運轉狀態控制 / 顯示 Operation status Indicator light

- ☑ 啟動及停止運轉狀態控制。
- ☑ 啟動及停止運轉狀態顯示。
- ☑ Start/Stop running control.
- ☑ Start/Stop running display.



三段風量切換 Three-stage fan speed switch

調整風量，強、中、弱三段式風量循環切換。
 Adjust the air flow and then shift between strong, medium and weak sections of air flow alternately.

定時清針提醒 Regular cleaning indicator light

☑ 當定時清針提醒燈亮起時，使用快速清針模組的旋鈕清潔完成後，按下☑消除清針提醒燈，並再次啟動計時器。
 When the ☑ periodic pin cleaning reminder indicator is illuminated push the knob of the quick pin-cleaning module to clean the Discharge. After finishing the cleaning, push the ☑ pin removing reminder indicator and then start the Timer once again.



T 型
T Series

運轉狀態控制 / 顯示 Operation status light

- ☑ 啟動及停止運轉狀態控制。
- ☑ 啟動及停止運轉狀態顯示。
- ☑ Start/Stop running control.
- ☑ Start/Stop running display.



☑ FAN ERR. 風扇異常警示燈 (紅燈) Fan Error Warning Lamp (Red LED)

MODE 功能 / 鎖定密碼設定 Function/lock password setup

HV PAUSE ☑ 離子放電暫停 (藍燈) Ionic Discharge Pause (Blue LED)

定時清針提醒 Regular cleaning indicator light

☑ 當定時清針提醒燈亮起時，使用快速清針模組的旋鈕清潔完成，按下☑消除清針提醒燈，並再次啟動計時器。
 When the ☑ periodic pin cleaning reminder indicator is illuminated push the knob of the quick pin-cleaning module to clean the Discharge. After finishing the cleaning, push the ☑ pin removing reminder indicator and then start the Timer once again.

設定狀態顯示窗 Settings display window

F. 12 F.	風量調整	Fan speed
H. 5 H.	清針定時	Hour
P. 1 P.	離子放電暫停	Pause
O. 0-0	出力模式	Output
L. 3 L.	面板亮度	Light
8234	鎖定密碼	Lock Password

十二段風量切換 Twelve-stage fan speed switch

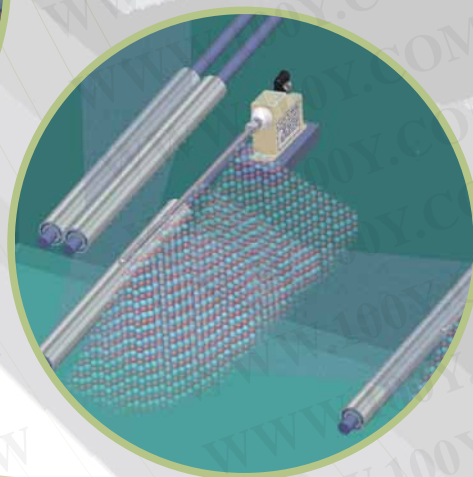
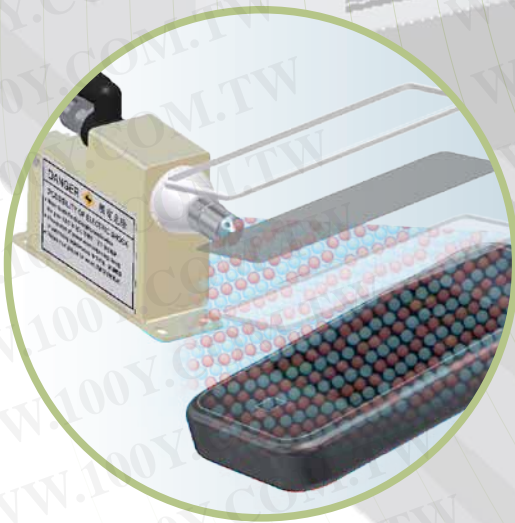
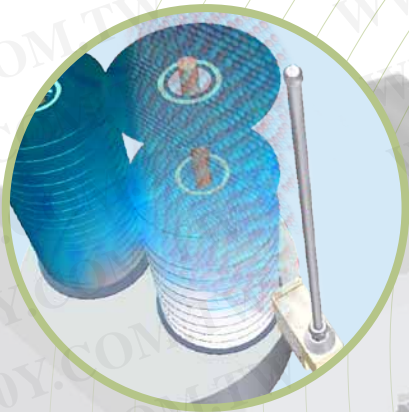
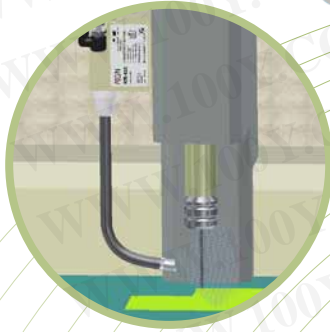
按☑增加風量，最大為 F. 12 段
 按☑減少風量，最小為 F. 01 段
 Push☑to increase the air flow and the max. will be F. 12 section.
 Push☑to decrease the air flow and the min. will be F. 01 section.

KIB-025

氣壓吹氣型 Blow Type



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特長 Features



不會形成集中電場，可以接近被除電物至1mm的距離

Does not form concentrated electric fields; the nozzle could be as close as 1mm to the targeted object

一般的靜電消除器由於高壓施加部會形成強力集中電場，所以太接近的話，可能對設備裝置造成損害；而KGN靜電消除裝置不會形成集中電場，對設備裝置不會造成損害，因此噴嘴端與被除電物可接近至1mm的微距消除靜電。

A strong electric field is generated at the high voltage applying section in the current ionizer. This can cause breakage of the device when bringing the ionizer close.

However, the KGN IONIZER causes no damage to the device even when bringing it close.

Minimum distance between the nozzle and the targeted object is 1mm.



電離子可經由導電性管或金屬管移送，克服設備內空間狹窄的困擾

The ions could be transferred through a conductive tube or metal tube, overcoming the problem of narrow spaces in the equipment

在除電器本體無法設置的地方，亦可達成除靜電目的；不受限於安裝空間。

Allows removal of static electricity at limited space to install the ionizer body.



用低電壓電源即可使用，無高電壓配線的危險性

Could be used with low-voltage power supplies; there's no risk of high voltage wiring.

內建小型高壓電源變壓器，用低電壓DC電源即可使用，無須專用的高壓電源及高壓配線，配線應用時沒有高壓電壓問題的困擾。由於輸出電壓低，所以使用時幾乎不會產生電氣雜訊。

This unit can be used with a low-voltage DC power supply due to an in-built compact high voltage transformer. It eliminates high voltage wiring and power supply, making it free of problems caused by power supply and wiring sections. Very low generation of electrical noise due to low-voltage output.



多樣性的噴嘴配件供選擇，可對應各種靜電消除需求

Multiple choices for nozzle accessory to apply various enquiry

應用導電性、可撓性管、金屬管...等，來移送電子離子，由於能以精確的定位方式接近被除電物，所以能達到迅速且確實的除靜電效能。

By using an air tube or flexible tube metal pipe, it can quickly remove static electricity from a targeted point due to the ability to move the nozzle closer to the point.



優越的離子平衡，確保除靜電效能

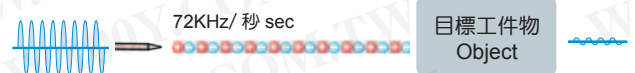
Due to good ions balance, removal of static electricity is always possible

除電距離10mm，離子平衡 $\pm 15V$ （依使用條件狀況，可達 $\pm 10V$ 以內）。

除電距離100mm， $\pm 1000V$ 至 $\pm 100V$ 的衰減時間可在1秒內。

$\pm 15V$ range at 10mm distance. (Under some conditions, with 10V this could be attainable.)

Decay time from $\pm 1000V$ to $\pm 100V$ at 100mm distance is within a second.



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靜電消除裝置性能規格表 Specifications

KIB-025			
使用流體	Media	乾淨壓縮空氣	Air (Non-lubricated dry air)
電源	Power Supply	DC24V ±5%	DC24V ±5%
消費電流	Consumption Current	約100mA	Approximate 100mA
操作高壓電源	Operating High-Voltage Power Supply	內建高壓高頻超小型變壓器	Miniaturized AC high-voltage high-frequency type power supply built-in
出力電源	Output Voltage	約 2 KV	Approximate 2 KV
離子平衡	Ion Balance	±15V	±15V (300mm away for the nozzle outlet)
LED動作指示燈 Indicator LED	電源 Power Supply	電源入力時綠燈亮	Power indicator LED turns on (Green)
	異常 Abnormality	異常時紅燈亮	Abnormality indicator LED turns on (Red)
電源安全迴路	Abnormality Output Circuit	NPN電晶體出力	Open collector (NPN) 20mA (Max. 50mA)
臭氧量	O ³ Generating Amount	0.03 ppm以下	0.03 ppm or less
空氣流量*	Supply Air Flow Range*	約 50ℓ/min (ANR)	Approximate 50ℓ/min (ANR)
使用壓力範圍	Operating Air Pressure Range	0.05~0.5MPa (0.5~5.0kgf/cm ²)	0.05~0.5MPa (0.5~5.0kgf/cm ²)
使用環境溫度	Operating Environmental Temperature	0~40°C (室內)	0~40°C (indoors)
外型尺寸(本體) W x D x H	Overall Dimensions (Main Unit) W x D x H	25X92X56(mm)	25X92X56 (mm)
重量(本體)	Weight (Main Unit)	164(g)	164(g)
標準配件	Accessories	入出力訊號線組(2M) 接地線組(2M) 放電針清潔刷 操作手冊	Power and signal cable (2M) Ground cable (2M) Discharging needle clean brush Instruction manual

*空氣流量係使用KIB-N01S噴嘴，在0.1MPa條件下所得實測值。

*The airflow is according to the measured value under the 0.1MPa conditions with a KIB-N01S nozzle.

KIB-025本體一定要搭配噴嘴(選購)及電源變壓器(選購)才可以使用。

The main unit cannot be operated alone; always use it with a nozzle (option) and AC adapter (option).

備註：1. 靜電消除時間：由±1000V降至±100V所需之時間。

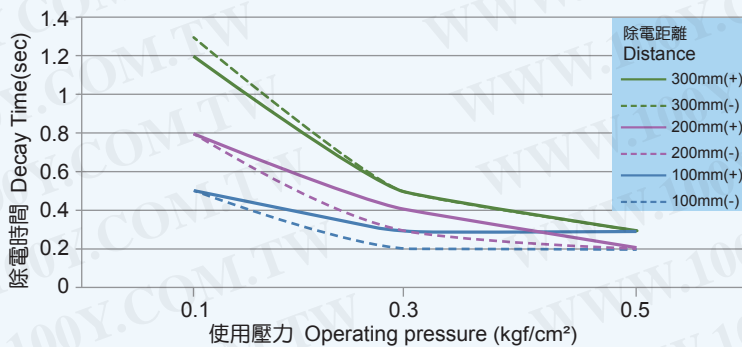
2. 測試數據係本社測試條件所得實測值。

Note: 1. Static elimination time: ±1000V~±100V.

2. The decay time data is measured by in-house test standards.

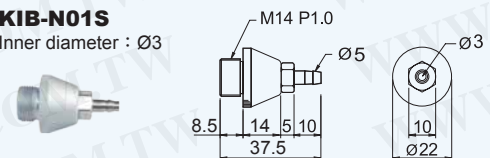
除電時間 Decay Time

標準型噴嘴 Standard Nozzle KIB-N01S



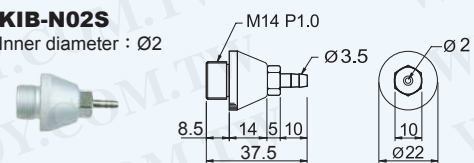
KIB-N01S

Inner diameter : Ø3

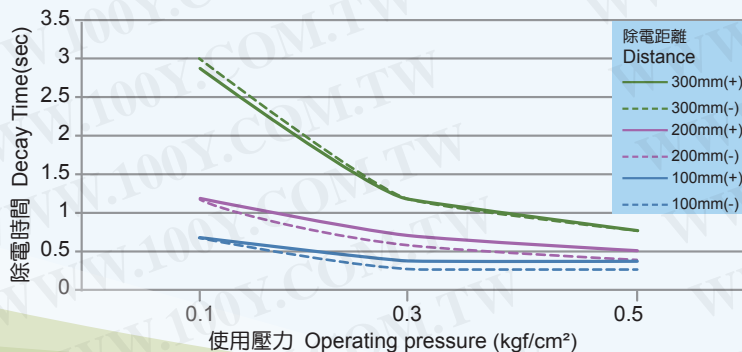


KIB-N02S

Inner diameter : Ø2

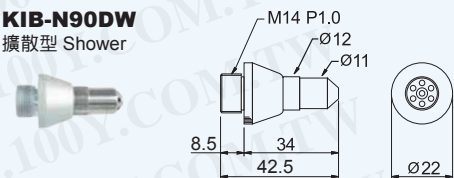


擴散型噴嘴 Shower Nozzle KIB-N90DW



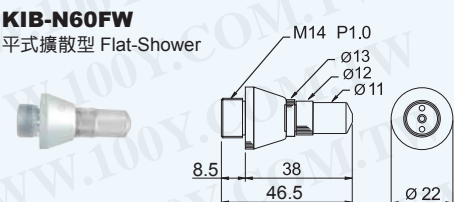
KIB-N90DW

擴散型 Shower



KIB-N60FW

平式擴散型 Flat-Shower

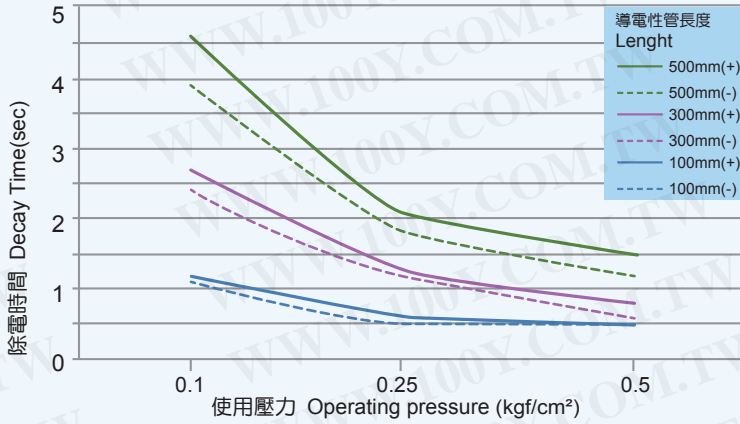


除電時間 Decay Time

備註：1. 靜電消除時間：由±1000V降至±100V所需之時間。
 2. 測試數據依本社測試條件所得實測值。
 Note：1. Static elimination time: ±1000V~±100V.
 2. The decay time data is measured by in-house test standards.

導電性管 Conductive Tube KIB-N01S + KIB-T500C

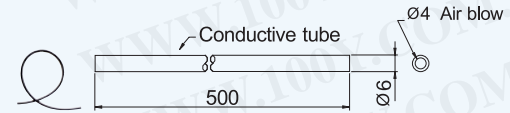
* 除電工件距離 50mm
 Work piece distance at 50mm.



KIB-T500C

★需與標準型噴嘴KIB-N01S搭配使用
 Use with the standard nozzle.

Outer diameter: $\varnothing 6$
 Inner diameter: $\varnothing 4$



★KIB-T500C可另外加購擴散噴嘴頭
 (Optional Accessories)

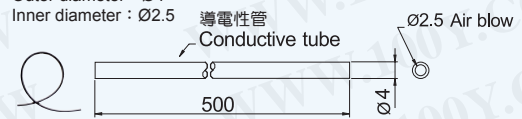
KIB-H90TW



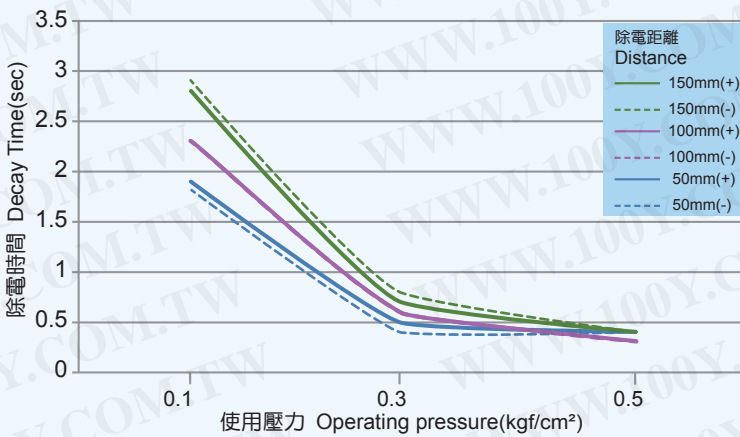
KIB-T500C4

★需與標準型噴嘴KIB-N02S搭配使用
 Use with the standard nozzle.

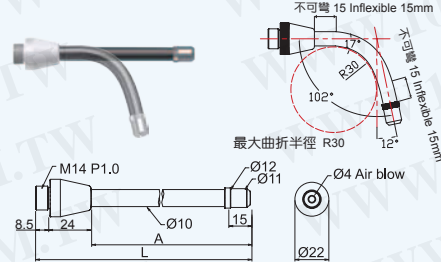
Outer diameter: $\varnothing 4$
 Inner diameter: $\varnothing 2.5$



可撓性管 Flexible Tube KIB-N100D



KIB-N100D(100mm)~KIB-N500D(500mm)



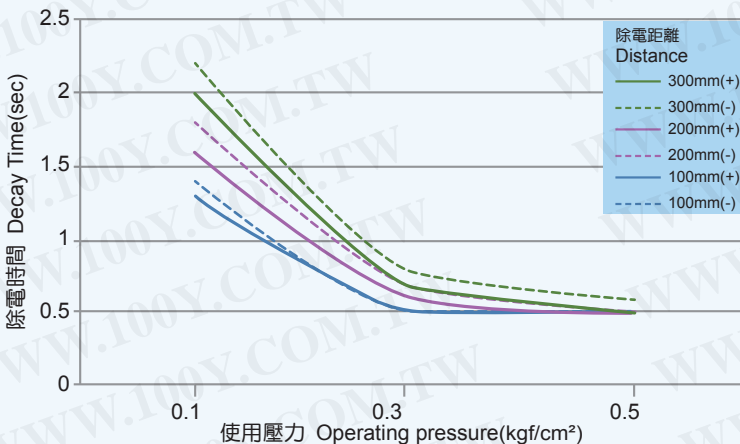
Model No.	A	L
KIB-N100D	94	126.5
KIB-N200D	194	226.5
KIB-N300D	294	326.5
KIB-N400D	394	426.5
KIB-N500D	494	526.5

★可另外加購擴散噴嘴頭搭配使用
 (Optional Accessories)

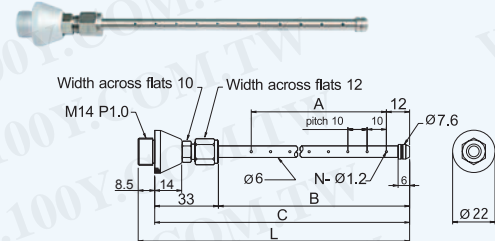
KIB-H90DW KIB-H60FW



不銹鋼棒型 Straight Bar Pipe KIB-N100B



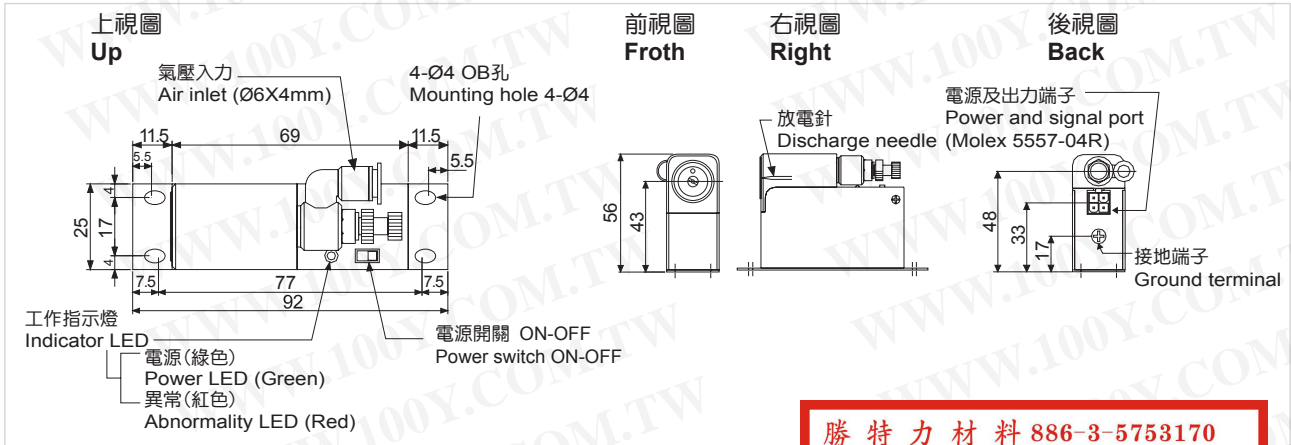
KIB-N100B(100mm)~KIB-N700B(700mm)



Model No.	A	B	C	L	N
KIB-N100B	100	130	163	171.5	11
KIB-N200B	200	230	263	271.5	21
KIB-N300B	300	330	363	371.5	31
KIB-N400B	400	430	463	471.5	41
KIB-N500B	500	530	563	571.5	51
KIB-N600B	600	630	663	671.5	61
KIB-N700B	700	730	763	771.5	71

單位UNIT: mm

外型尺寸圖 Dimensions (單位UNIT: mm)

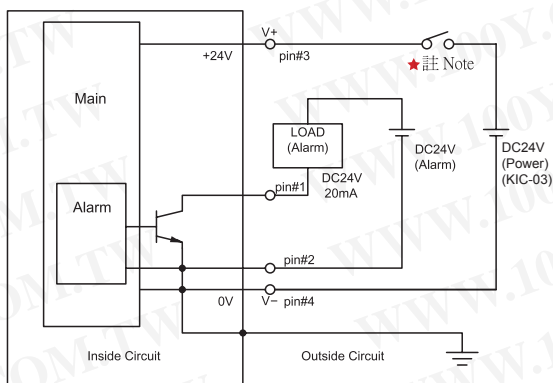


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配線說明 Description of Wiring

入出力接線圖

Power and signal wiring structure

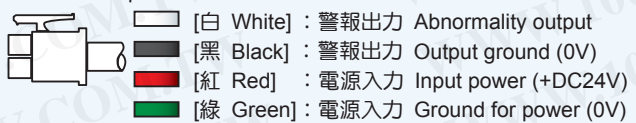


★註：控制電源ON/OFF，請由(V+)端控制
 ★Note：ON/OFF of the power at the(V+)
 留意點：pin#2 及 pin#4，與箱體在內部有連接
 Note：pin#2 and pin#4, connect with body.

入出力訊號線(標準配件)

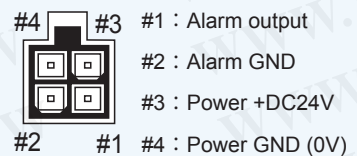
Power and signal cable(Accessory)

- 入力電源 Input power : +DC24V ± 5%
- Connector pin location and lead wire colors :















入力端子說明

Connector structure



外部控制ON/OFF，請由入力電源(+DC24V)端接線
 ON/OFF of the power to the ionizer at the input side(+DC24V)

選購配件 Optional Accessories (單位UNIT: mm)

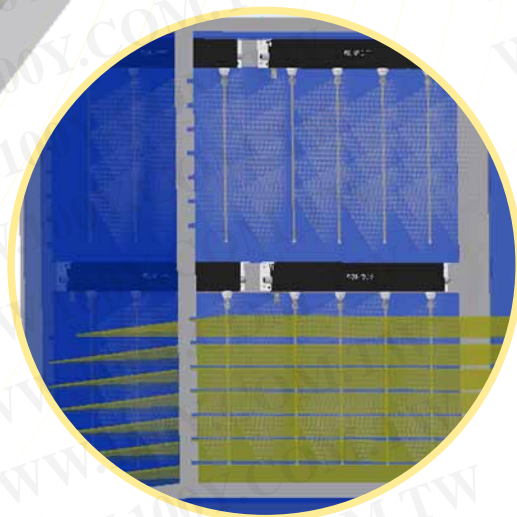
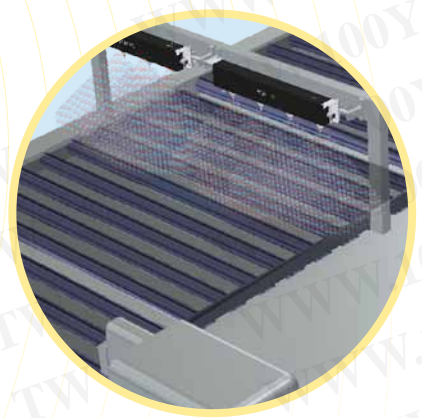
<p>● 放電針 Discharging Needle KIB-D16T 材質：鎢鋼 Material : Tungsten</p> 	<p>● 導電性管 Conductive Tube KIB-T500C KIB-T500C4 ★需與標準型噴嘴KIB-N01S.KIB-N02S搭配使用 ★ Use with the standard nozzle.</p> 	<p>● 可撓性管型 Flexible Tube nozzles KIB-N100D(100mm)~500D(500mm)</p>  <p>★可另外加購擴散噴嘴搭配使用 (Optional Accessories) KIB-H90DW KIB-H60FW</p>  
<p>● 電源變壓器 AC Adapter AC KIC-03 (AC110~240)</p> 	<p>★KIB-T500C可另外加購擴散噴嘴 ★Optional Accessories for KIB-T500C KIB-H90TW</p> 	
<p>● Shower Nozzle 擴散型 KIB-N90DW KIB-N60FW 擴散型 Shower 平式擴散型 Flat-Shower</p>  	<p>● 標準型 Standard Nozzle KIB-N01S KIB-N02S Inner diameter : Ø3 Inner diameter : Ø2</p>  	<p>● 不銹鋼棒型 Straight Bar Pipe KIB-N100B(100mm)~N700B(700mm)</p> 

KIS-400

空間除電型 Free Space Type



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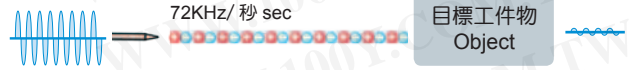
特長 Features



優越的離子平衡，確保除靜電效能
Due to good ion balance, removal of static electricity is always possible

高精度、高穩定的離子平衡：±25V。(依使用條件及狀況，可達±10V以內)

It provides high accuracy and stabilization of balance of ionization ±25V. (Under some conditions, with ±10V this could be attainable.)



多樣性的噴嘴配件供選擇，可對應各種靜電消除需求
Multiple choices for nozzle accessory to apply various enquiry

應用導電性、可撓性管、金屬管...等，來移送電子離子，由於能以精確的定位方式接近被除電物，所以能達到迅速且確實的除靜電效能。

By using an air tube or flexible tube metal pipe, it can quickly remove static electricity on a targeted point due to the ability to move the nozzle closer to the point.



安全監控十分簡便
Security monitoring, very simple

高壓異常指示燈及輸出接點標準配備，安全監控十分簡便。

Abnormal high-pressure warning indicator and output accessories are equipped for easy safety monitoring.



節省更新成本、維修費用
Save on updating costs and maintenance fees

放電針可單獨購買及自行更換安裝，有效提昇使用壽命及確保除靜電效能；節省更新成本及維修保養費用。

For economy and efficiency, replaceable discharge needles are available as required.

KIB-D17T

放電針
 Discharging Needle



材質：鎢鋼
 Material: Tungsten



鋁質外殼輕巧設計
Aluminum case is lightweight

小型輕量化設計，不論應用於工作檯上或設備搭載皆可提供彈性的設置選擇。

Aluminum case is lightweight. The Ionzier having compact and light, versatility of mounting for equipment or bench.

靜電消除裝置性能規格表 Specifications

KIS-400			
使用流體	Media	乾淨壓縮空氣	Air (Non-lubricated dry air)
電源	Power Supply	DC24V ±5%	DC24V ±5%
消費電流	Consumption Current	約 150mA	Approximate 150mA
操作高壓電源	Operating High-Voltage Power Supply	內建高壓高頻超小型變壓器	Miniaturized AC high-voltage high-frequency type power supply built-in
出力電源	Output Voltage	約 2 KV	Approximate 2 KV
離子平衡	Ion Balance	±25V	±25V (300mm away for the nozzle outlet)
LED動作指示燈	電源 Power Supply	電源入力時綠燈亮	Power indicator LED turns on (Green)
Indicator LED	異常 Abnormality	異常時紅燈亮	Abnormality indicator LED turns on (Red)
電源安全迴路	Abnormality Output Circuit	NPN電晶體出力	Open collector (NPN) 20mA (Max. 50mA)
臭氧量	O ³ Generating Amount	0.09 ppm以下	0.09 ppm or less
使用壓力範圍	Operating Air Pressure Range	0.2~0.5MPa (2.0~5.0kgf/cm ²)	0.2~0.5MPa (2.0~5.0kgf/cm ²)
使用環境溫度	Operating Environmental Temperature	0~40°C (室內)	0~40°C (indoors)
外型尺寸(本體)	Overall Dimensions(Main Unit)	414X60X36(mm)	414X60X36(mm)
LxDxH	L x D x H		
重量(本體)	Weight(Main Unit)	800(g)	800(g)
標準配件	Accessories	入出力訊號線組 (2M) 接地線組 (2M) 放電針清潔刷 操作手冊	Power and signal cable(2M) Ground cable(2M) Discharging needle clean brush Instruction manual

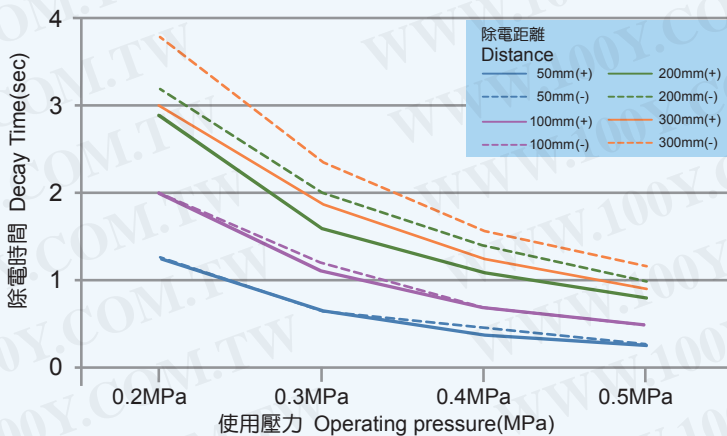
KIS-400本體一定要搭配噴嘴(選購)及電源變壓器(選購)才可以使用。
 The main unit cannot be operated alone, always use it with a nozzle(option) and AC adapter (option).

除電時間 Decay Time

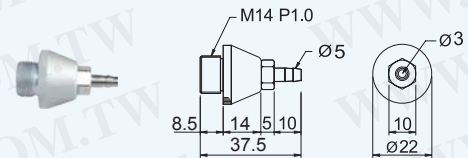
備註：1. 靜電消除時間：由±1000V降至±100V所需之時間。
 2. 測試數據依本社測試條件所得實測值。

Note: 1. Static elimination time: ±1000V~±100V.
 2. The decay time data is measured by in-house test standards.

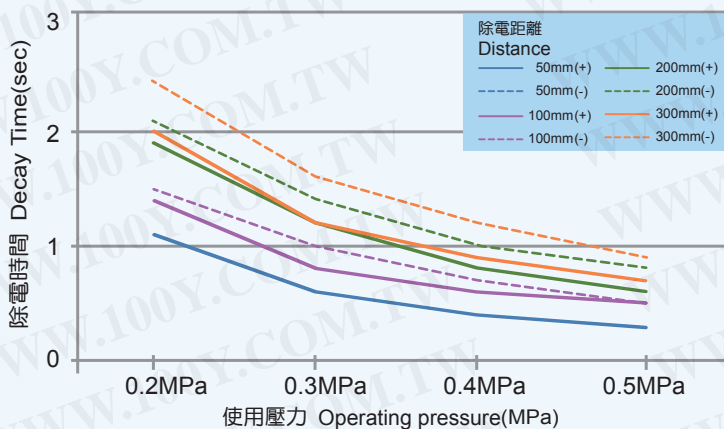
標準型噴嘴 Standard Nozzle KIB-N01S



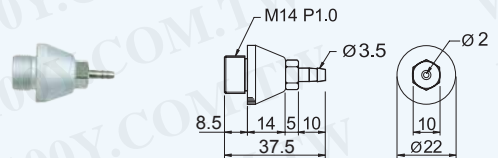
KIB-N01S
Inner diameter: Ø3



KIB-N02S



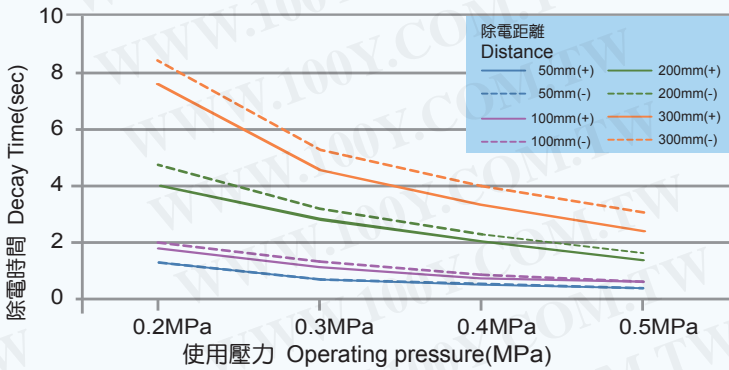
KIB-N02S
Inner diameter: Ø2



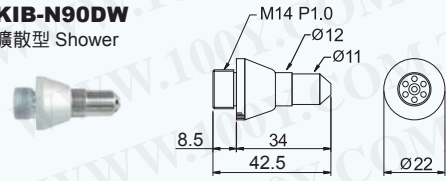
除電時間 Decay Time

備註：1. 靜電消除時間：由 ±1000V 降至 ±100V 所需之時間。
 2. 測試數據依本社測試條件所得實測值。
 Note: 1. Static elimination time: ±1000V~±100V.
 2. The decay time data is measured by in-house test standards.

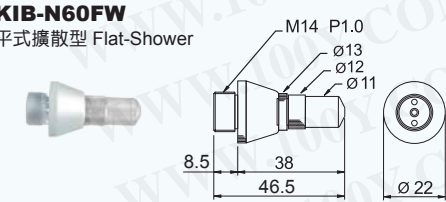
**擴散型噴嘴 Shower Nozzle
KIB-N90DW**



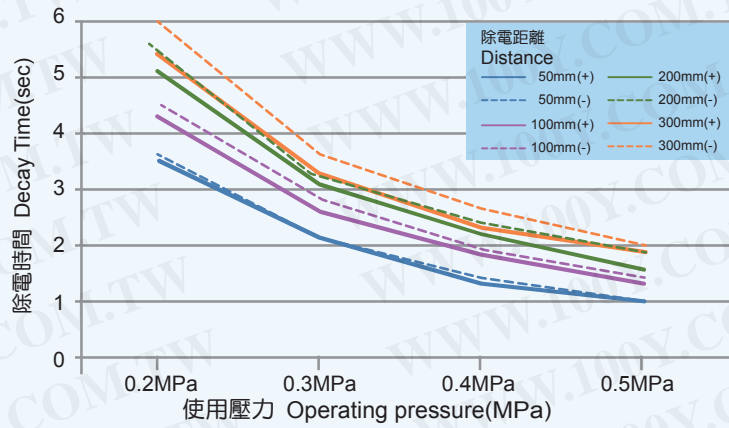
KIB-N90DW
擴散型 Shower



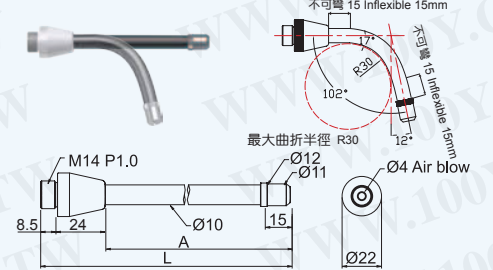
KIB-N60FW
平式擴散型 Flat-Shower



**可撓性管 Flexible Tube
KIB-N100D**



KIB-N100D(100mm)~KIB-N500D(500mm)



Model No.	A	L
KIB-N100D	94	126.5
KIB-N200D	194	226.5
KIB-N300D	294	326.5
KIB-N400D	394	426.5
KIB-N500D	494	526.5

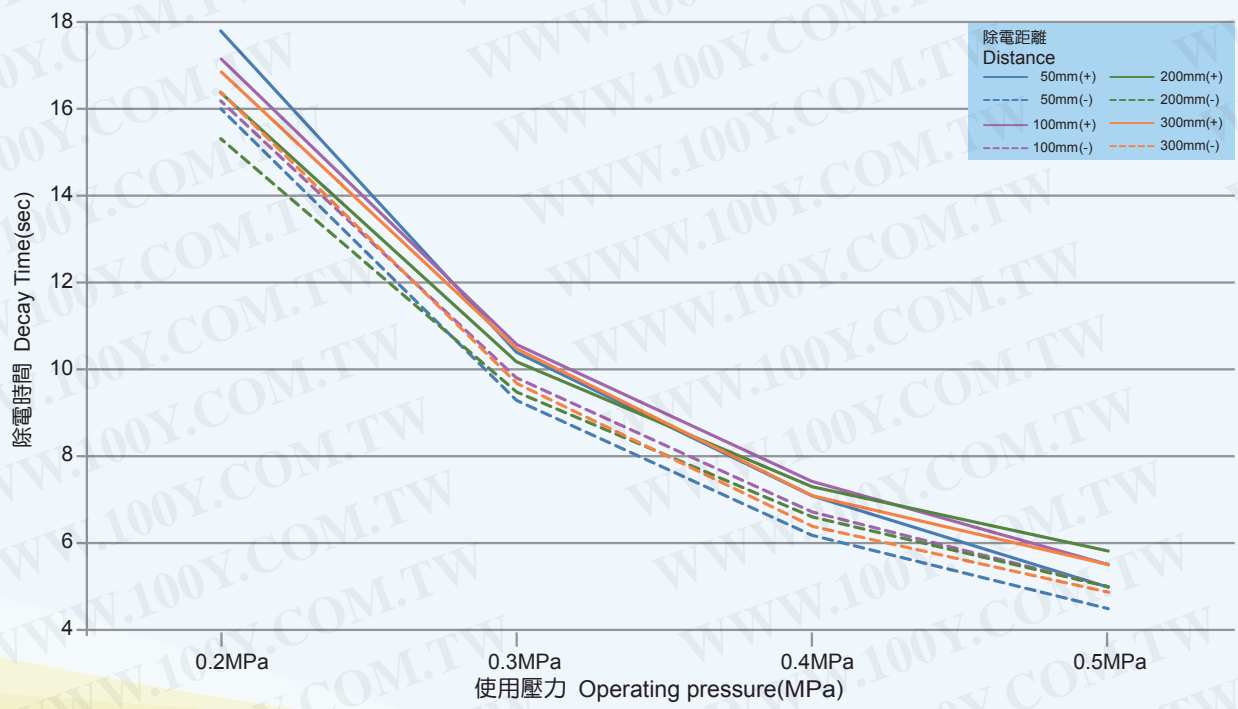
單位UNIT: mm

★可另外加購擴散噴嘴頭搭配使用
(Optional Accessories)

KIB-H90DW KIB-H60FW



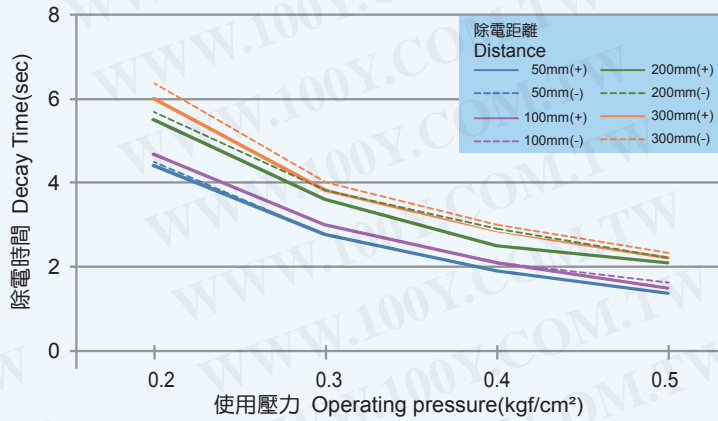
KIB-N500D



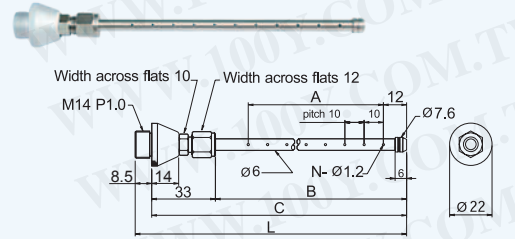
除電時間 Decay Time

備註：1. 靜電消除時間：由 ±1000V 降至 ±100V 所需之時間。
 2. 測試數據依本社測試條件所得實測值。
 Note: 1. Static elimination time: ±1000V→±100V.
 2. The decay time data is measured by in-house test standards.

不銹鋼棒型 Straight Bar Pipe KIB-N100B



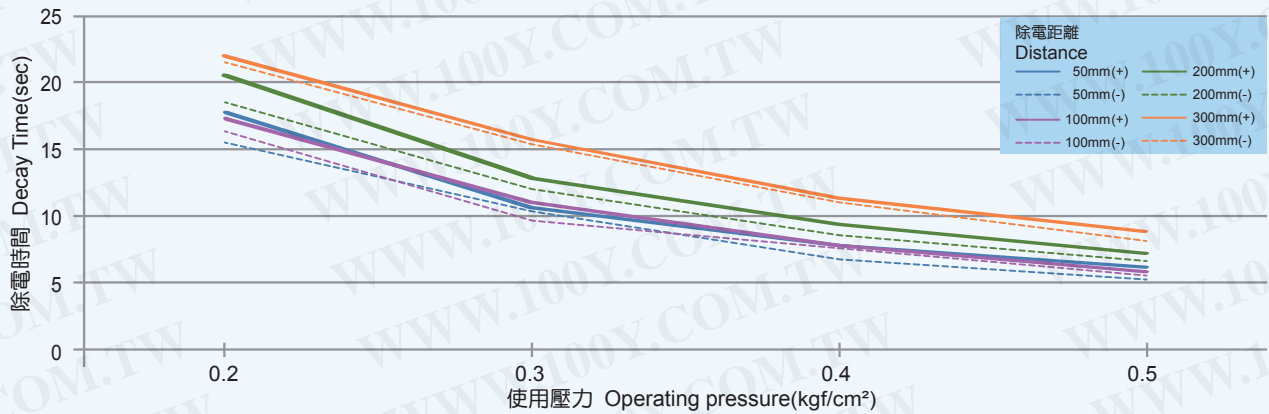
KIB-N100B(100mm)~KIB-N500B(500mm)



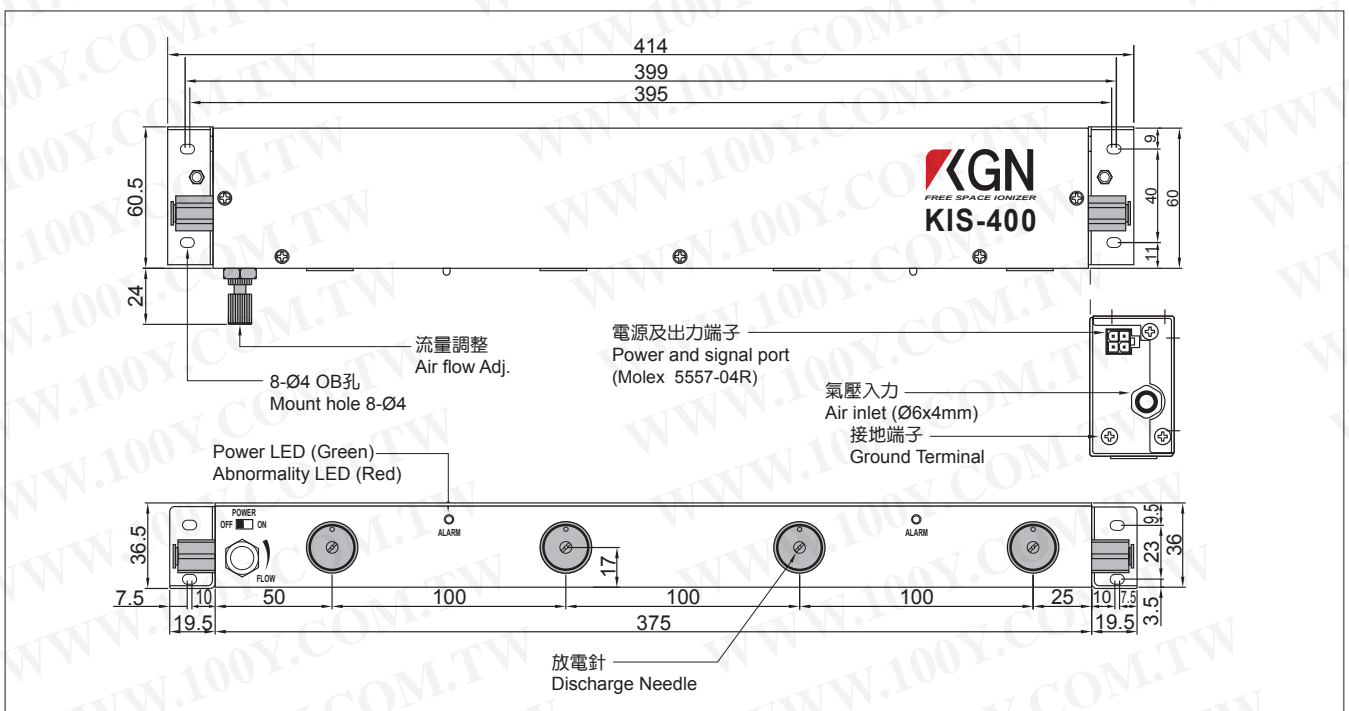
Model No.	A	B	C	L	N
KIB-N100B	100	130	163	171.5	11
KIB-N200B	200	230	263	271.5	21
KIB-N300B	300	330	363	371.5	31
KIB-N400B	400	430	463	471.5	41
KIB-N500B	500	530	563	571.5	51

單位UNIT: mm

KIB-N500B



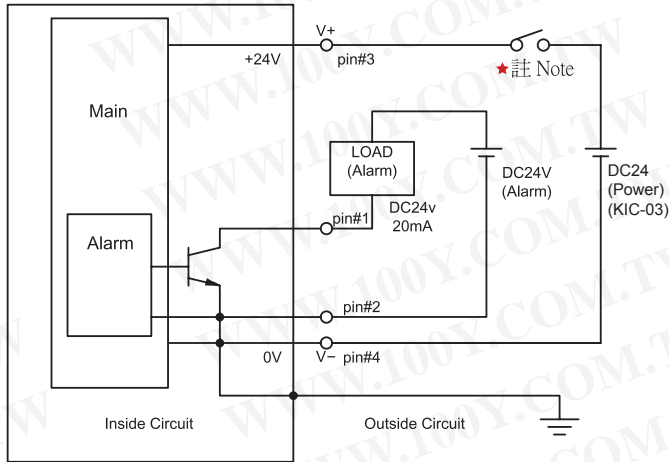
外型尺寸圖 Dimensions (單位UNIT: mm)



配線說明 Description of Wiring

入出力接線圖

Power and signal wiring structure



★註：控制電源ON/OFF，請由(V+)端控制
 ★Note：ON/OFF of the power at the(V+)
 留意點：pin#2 及 pin#4，與箱體在內部有連接
 Note：pin#2 and pin#4，connect with body.

入力端子說明

Connector structure

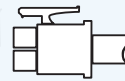


#1：Alarm output
 #2：Alarm GND
 #3：Power DC+24V
 #4：Power GND (0V)

入出力訊號線(標準配件)

Power and signal cable(Accessory)

- 入力電源 Input power：+DC24V ± 5%
- Connector pin location and lead wire colors：



- [白 White]：警報出力 Abnormality output
- [黑 Black]：警報出力 Output ground (0V)
- [紅 Red]：電源入力 Input power (+DC24V)
- [綠 Green]：電源入力 Ground for power (0V)

外部控制ON/OFF，請由入力電源(+DC24V)端接線
 ON/OFF of the power to the ionizer at the input side(+DC24V)

選購配件 Optional Accessories

<p>● 放電針 Discharging Needle KIB-D17T 材質：鎢鋼 Material：Tungsten</p> 	<p>● 導電性管 Conductive Tube KIB-T500C KIB-T500C4 ★需與標準型噴嘴KIB-N01S,KIB-N02S搭配使用 ★Use with the standard nozzle.</p> 	<p>● 可撓性管型 Flexible Tube nozzles KIB-N100D(100mm)~500D(500mm)</p> 
<p>● 電源變壓器 AC Adapter AC KIC-03 (AC110~240)</p> 	<p>★KIB-T500C可另外加購擴散噴嘴 ★Optional Accessories for KIB-T500C</p> <p>KIB-H90TW</p> 	<p>★可另外加購擴散噴嘴頭搭配使用 (Optional Accessories)</p> <p>KIB-H90DW KIB-H60FW</p> 
<p>● 序列串連線 Straight Bar Pipe KGN-S.L Cable (2m)</p> 	<p>● 標準型 Standard Nozzle</p> <p>KIB-N01S KIB-N02S Inner diameter：Ø3 Inner diameter：Ø2</p> 	<p>● 不銹鋼棒型 Straight Bar Pipe KIB-N100B(100mm)~N500B(500mm)</p> 
<p>● Shower Nozzle 擴散型</p> <p>KIB-N90DW KIB-N60FW 擴散型 Shower 平式擴散型 Flat-Shower</p> 		

KIG-01

槍型 Air Gun Type



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)



特長 Features



輕巧設計，降低手部疲勞

Lightweight design, reduces hand fatigue

體積小、重量輕(本體：220g)的優點，有效降低長時間手持使用的疲勞負荷。

Compact and light (Main body only 220g) to reduce hand fatigue.



配備氣壓流量調節閥，可依使用需求調節適合的流量；節省氣壓損耗量

Equipped with an airflow adjustment valve, can adjust to suitable flow according to usage requirements



NG 未配備氣壓流量調節閥
Without air flow adjustment

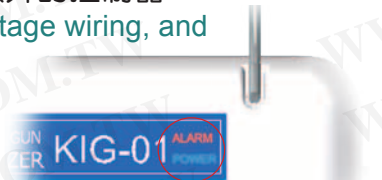


安全的設計，不須危險的高電壓引線，也不須要額外的控制器

Safe design, does not require the dangerous high-voltage wiring, and does not need additional controllers

安全的設計，內建超小型的壓電陶瓷變壓器，沒有高壓元件及高壓電纜外漏的問題。

The safe design of the device is ensured with a piezotechnology transformer inside the gun and H.V. section and H.V. cable are not required.



放電異常時有紅色LED警示燈及接點輸出指示燈，可有效監控靜電消除器的運轉狀態。
Alarm LED light and output port light can monitor the IONIZER when any abnormality occurs.



優越的離子平衡，確保除靜電效能

Due to good ion balance, removal of static electricity is always possible

離子平衡：±10V，除電性能優異、低噪音，同時確保除電效能及工作環境品質。

Ion balance : ±10V excellent static electricity remove performance, low noise, and ensures elimination of static electricity efficiently in working environment.



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

靜電消除裝置性能規格表 Specifications

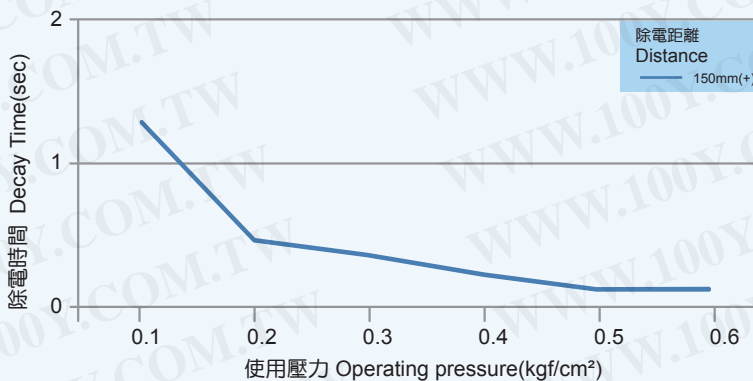
KIG-01			
使用流體	Media	乾淨壓縮空氣	Air (Non-lubricated dry air)
電源	Power Supply	DC24V ±5%	DC24V ±5%
容量	Capacity	3VA	3VA (0.1A)
消費電流	Consumption Current	約 100mA	Approximate 100mA
操作高壓電源	Operating High-Voltage Power Supply	內建高壓高頻超小型變壓器	Miniaturized AC high-voltage high-frequency type power supply built-in
出力電源	Output Voltage	約 2 KV · 100KHz	Approximate 2 KV · 100KHz
離子平衡	Ion Balance	±10V	±10V
LED動作指示燈 Indicator LED	電源 Power Supply	電源入力時藍燈亮	Power indicator LED turns on (Blue)
	異常 Abnormality	異常時紅燈亮	Abnormality indicator LED turns on (Red)
臭氧量	O ³ Generating Amount	0.04 ppm以下	0.04 ppm or less
空氣流量	Supply Air Flow Range	最大值160l/min (6 kgf/cm ²)	Max.160l/min (6 kgf/cm ²)
使用壓力範圍	Operating Air Pressure Range	0.05~0.6MPa (0.5~6.0kgf/cm ²)	0.05~0.6MPa (0.5~6.0kgf/cm ²)
使用環境溫度	Operating Environmental Temperature	0~40°C (室內)	0~40°C (indoors)
外型尺寸(本體) W x H x D	Overall Dimensions (Main Unit) W x H x D	115X140X25 (mm)	115X140X25 (mm)
重量(本體)	Weight (Main Unit)	220(g)	220(g)
標準配件	Accessories	電源變壓器(KIC-04) 放電針清潔刷 操作手冊 懸掛吊鉤	AC adapter (KIC-04) Discharging needle clean brush Instruction manual Hanging ring

KIG-01本體一定要搭配噴嘴(選購)及電源變壓器(標準配件)才可以使用。
 The main unit cannot be operated alone, always use it with a nozzle (Option) and AC adapter (Standard).

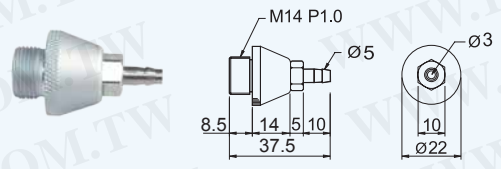
除電時間 Decay Time

備註：1. 靜電消除時間：由 ±1000V 降至 ±100V 所需之時間。
 2. 測試數據依本社測試條件所得實測值。
 Note: 1. Static elimination time: ±1000V~±100V.
 2. The decay time data is measured by in-house test standards.

標準型噴嘴 Standard Nozzle KIB-N01S

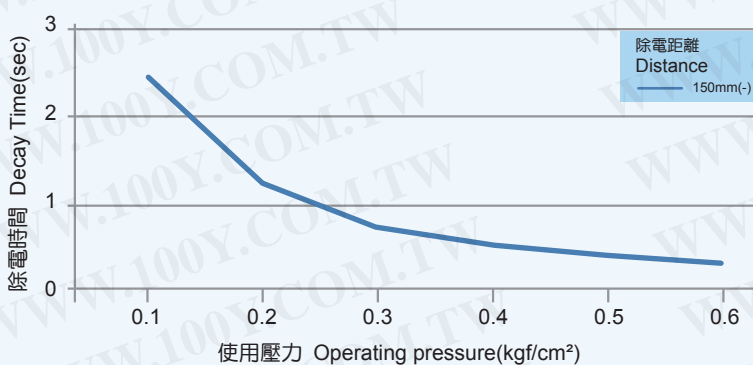


KIB-N01S Inner diameter: Ø3



單位UNIT: mm

可撓性管 Flexible Tube KIB-N100D



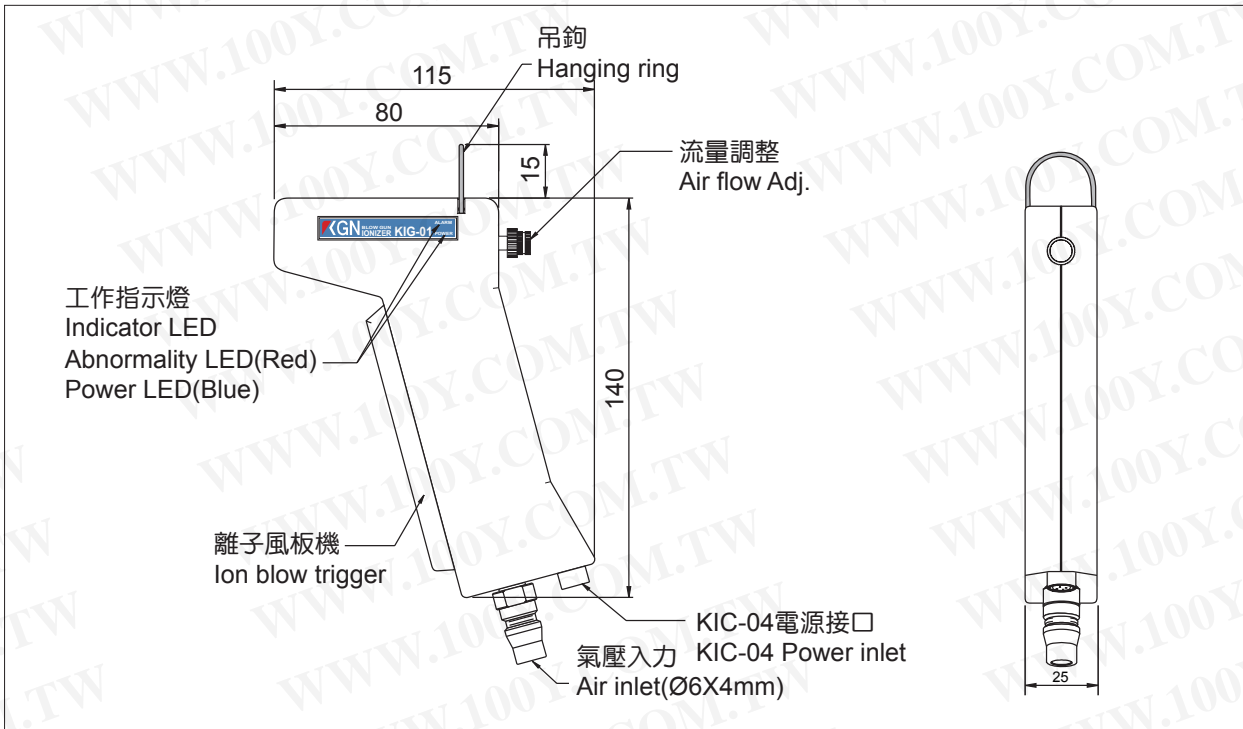
KIB-N100D(100mm)



Model No.	A	L
KIB-N100D	94	126.5

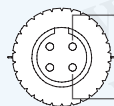
(單位UNIT: mm)

外型尺寸圖 Dimensions (單位UNIT: mm)



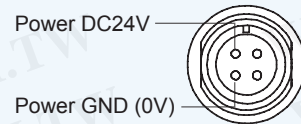
電源入力線 (標準配件)
Power and signal cable(Accessory)

- 入力電源 Input power : +DC24V ± 5%
- Connector pin location and lead wire colors :



電源入力 Input power (+DC24V)
 電源入力 Ground for power (0V)

入力端子說明
Connector structure



選購配件Optional Accessories

- 放電針 Discharging Needle
KIB-D11T
 材質：鎢鋼
 Material : Tungsten



- 標準型 Standard Nozzle
KIB-N01S
 Inner diameter : Ø3



- 可撓性管型 Flexible Tube nozzles
KIB-N100D(100mm)



安全上注意要點

Safety Precautions

- * 使用靜電除去裝置前，請先詳讀下列的注意要點。
- * Please read the below precautions carefully before use.

選用 **IKGN** 靜電除去裝置系列產品前，請先詳閱【安全上注意要點】及【使用說明書】並充分瞭解後再開始使用本產品。下列所示的【安全上注意要點】是為了讓使用者對 **IKGN** 靜電除去裝置做安全且正確的使用，並且是為了避免對使用者或他人造成危害及財產上的損害。

Before using the **IKGN IONIZER**, please read the 【Safety Precautions】 and 【Instruction manual】 carefully to ensure proper product use.

The safety precautions shown below are to help users use the product safely and correctly, and to prevent injury or damage to people or assets.



DANGER

- 請勿將靜電除去裝置應用於下列用途：
 1. 有關維持、管理人命及身體的醫療器具。
 2. 以移動、搬運人為目的的機構及機器裝置。
 3. 機械裝置安全用途的部品或零件。**IKGN** 靜電除去裝置並未以高度安全用途來設計。
- 請勿使用於有發火性、引火性等危險物品的場合或附近。
IKGN 靜電除去裝置並不具有防爆性設計，使用於上述場合會有發火、引火的可能。
- **IKGN** 靜電除去裝置作動時產生高壓電，因此，請絕對不要任意自分解、調整、改造等動作，以避免產生異常作動而造成受傷、觸電、火災等危險狀況。
- 進行檢查、定期清潔保養時，請務必先關掉電源再實施工作，否則會有觸電危險的可能。
- Please don't use for the purposes listed below
 1. Medical equipment to maintain or manage human lives or bodies.
 2. Mechanical devices or equipment designed for the purpose of moving or transporting people.
 3. Critical safety components in mechanical devices.The **IKGN IONIZER** is not designed for purposes that require advanced stages of safety.
- Please don't use in locations with or near dangerous substances, such as flammable or ignitable substances.
The **IKGN IONIZER** isn't explosion-proof. It could ignite or burst into flames.
The **IKGN IONIZER** generates high voltages. Please don't disassemble, adjust or modify the device as this can be very dangerous. Such action could result in a malfunction, injury, electric shock, fire, etc.
- Please prevent splash water on IONIZER. Spraying it with water, washing it, or using it under-water could result in injury, electric shock, fire, etc.
- Please shut-off power when inspecting, cleaning and performing maintenance.
Leaving the power on could result in electric shock.



WARNING

- 請勿在產品規格仕様範圍外使用 **IKGN** 靜電除去裝置，若強制使用將會造成故障、機能損壞或停止，且會顯著降低產品的使用壽命與效果。
- 請勿用手碰觸放電針，因其前端很尖銳，容易刺傷手指而造成傷害。
- 實施配線工作時請務必關閉電源，以避免發生觸電的危險。
- 使用前請確認配線是否正確，錯誤的配線是造成作動異常的主要原因之一。
- Please don't use the **IKGN IONIZER** outside of its specification range. Such use could result in product breakdown, cessation of function or damage. It could also result in a significant reduction of its service life.
- Please don't touch the discharging needles, because this has a sharp-pointed tip. It could result in injury.
- Please shut off power when performing wiring work. Leaving the power on could result in electric shock.
- Please check the catalogue to ensure the IONIZER wiring is correct. Error wiring could lead to abnormal operation.



CAUTION

- 若要使用AC變壓器時，請務必使用 **IKGN** 靜電除去裝置專用變壓器：KIC-03。
- 有關靜電除去裝置的基本構造方面請勿拆解或擅自加以改裝。
- When using an AC adapter, please use genuine **IKGN** AC adapter : KIC-03.
- Please don't disassemble the IONIZER relating to basic configurations.