

Smart Factory + DIT ESD Solutions



ESD Line up

Bar Type Ionizer

Type	Series	Frequency	Size	HVPS	Controller	Length(mm)	Application	Distance		
								1m	2m	
H/F AC	 ASG-P	29KHz	Slim	Built-in	Built-in	350~3000	Air Injection (CDA) Short/Medium Distance (within 500mm) Very Good Ion Balance			
	 ASG-PG	29KHz	Slim	Built-in	Built-in	250~300				
	 ASM-P*	29KHz	Slim	Built-in	Outer	150~3000				
Pulsed AC	 ASG-A	0.5~60Hz (Adjustable)	Slim	Built-in	Built-in	500~3000	Air Injection (CDA) Medium/Long Distance (within 200~2000mm) General Purpose			
	 ASM-A*	0.5~60Hz (Adjustable)	Slim	Built-in	Outer	300~3000				
	 ASR-A*	0.5~30Hz (Adjustable)	Ultra Slim	Outer	Outer	150~3000				
	 ASG-AU*	0.5~100Hz	Slim	Built-in	Built-in	450~3000	Air Injection (CDA) Optimum performance at ultra-close static removal distances (10~100mm)			
	 MB-L (Laminar Flow)	0.1~10Hz (Adjustable)	Normal	Built-in	Built-in	250~1500	• No Air Injection • Under EFU/FFU • Specialized in Room Ionizing			
	 MB-LS (Laminar Flow)	0.1~10Hz (Adjustable)	Normal	Built-in	Built-in	400~1000				

ESD Line up

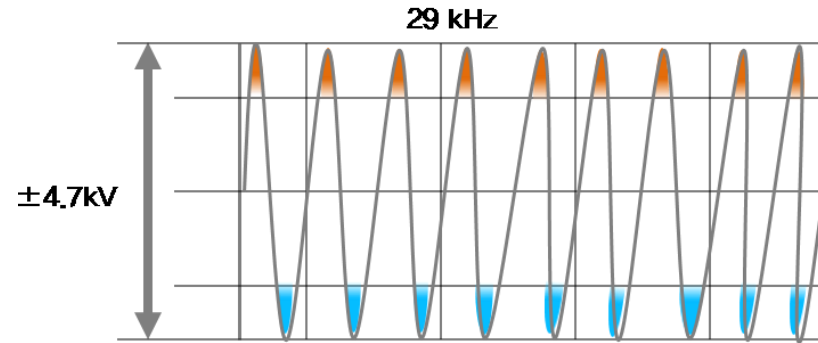
Ion Blower/Nozzle/Gun

Type	Series	Fan size (mm)	Auto Cleaning	Fan	Frequency	Airflow (per1 fan)	Ion Balance	Decay Time	Features	Application	Distance	
											1m	2m
Pulsed AC	 AMF-AE	140	Auto Cleaning	1~3	10~50Hz	Max. 6.425m ³ / min	Under ±30V	≤1sec @300mm	<ul style="list-style-type: none"> • Stable Ion Balance • Module Assembly Type : Various Combination Available • Easy Maintenance : Auto Pin Cleaning Function 	No Air Injection Short/Medium /Long Distance General Purpose Class over 1000  		
	 ASF-AD	120	Auto Cleaning/ Manual Cleaning	1	10~50Hz	Max. 4.6m ³ / Min			<ul style="list-style-type: none"> • Stable Ion Balance • Single Fan Type • Easy Maintenance : Auto Pin Cleaning Function • Separated Rare Fan Cover 			
	 MF-A90	90	N/A	1~5	10Hz	Max. 1.75m ³ / min		≤2sec @300mm	<ul style="list-style-type: none"> • Stable Ion Balance • Module Assembly Type : Various Combination Available • Easy Maintenance 			
H/F AC	 ASF-PD	120	Auto Cleaning/ Manual Cleaning	1	29KHz	Max. 4.6m ³ / Min	Under ±10V	≤1sec @300mm	<ul style="list-style-type: none"> • Stable Ion Balance • Single Fan Type • Easy Maintenance : Auto Pin Cleaning Function • Separated Rare Fan Cover 			
	 MF-90/95	90	Auto Cleaning/ Manual Cleaning	1~5	50kHz	Max. 1.75m ³ / min		≤2sec @300mm	<ul style="list-style-type: none"> • Stable Ion Balance • Module Assembly Type : Various Combination Available • Easy Maintenance 			
	 SF-40	40	N/A	1		Max. 0.27m ³ / Min		≤1.5sec @150mm	<ul style="list-style-type: none"> • Stable Ion Balance • Compact Size • High voltage alarm output • Easy Maintenance 	Air Injection (CDA) Short Distance (within 100~400mm) General Purpose Class 1000		
	 ZM-G (Nozzle/Gun)	-	-	-	50kHz	128L/ cm ² [0.3pa]	Under ±15	≤1sec @150mm	<ul style="list-style-type: none"> • Air Injection (CDA) • Very Short Distance (within 100mm) • General Purpose • Class 100 	Air Supply (CDA, N ₂) Optimized for Close range Class 100		

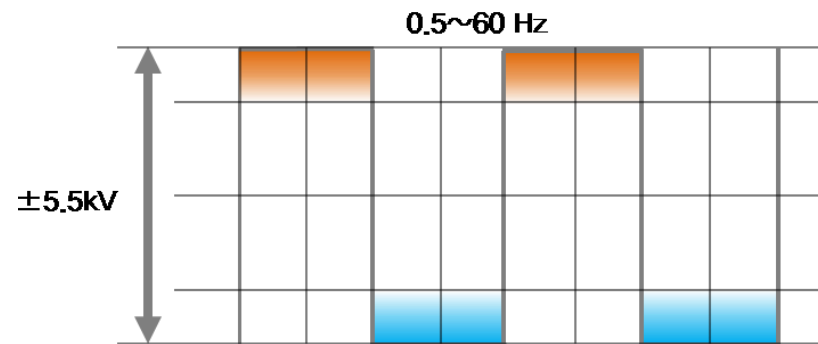
Ionizer Method

Comparison of high-frequency AC and pulsed AC types

H/F-AC Method



Pulsed-AC Method



This method generates positive(+) and negative(-) ions alternately at high frequency of 29kHz.



High Frequency AC type is suitable for medium-short distance.

- *Recommended distance is,
 - Bar type(G/P Series) : within 500mm
 - Fan type : within 500mm
 - Nozzle/Gun type : within 100mm



This method generates positive(+) and negative(-) ions alternately at general frequency of 60Hz.






Pulsed AC type is suitable for medium-long distance.


- *Recommended distance is,
 - Bar type(A, L Series) : 200mm~2000m
 - Fan type : within 500mm

※ Above data can be changed with operating environment and product setting.

ESD Line up

Electrostatic Meter

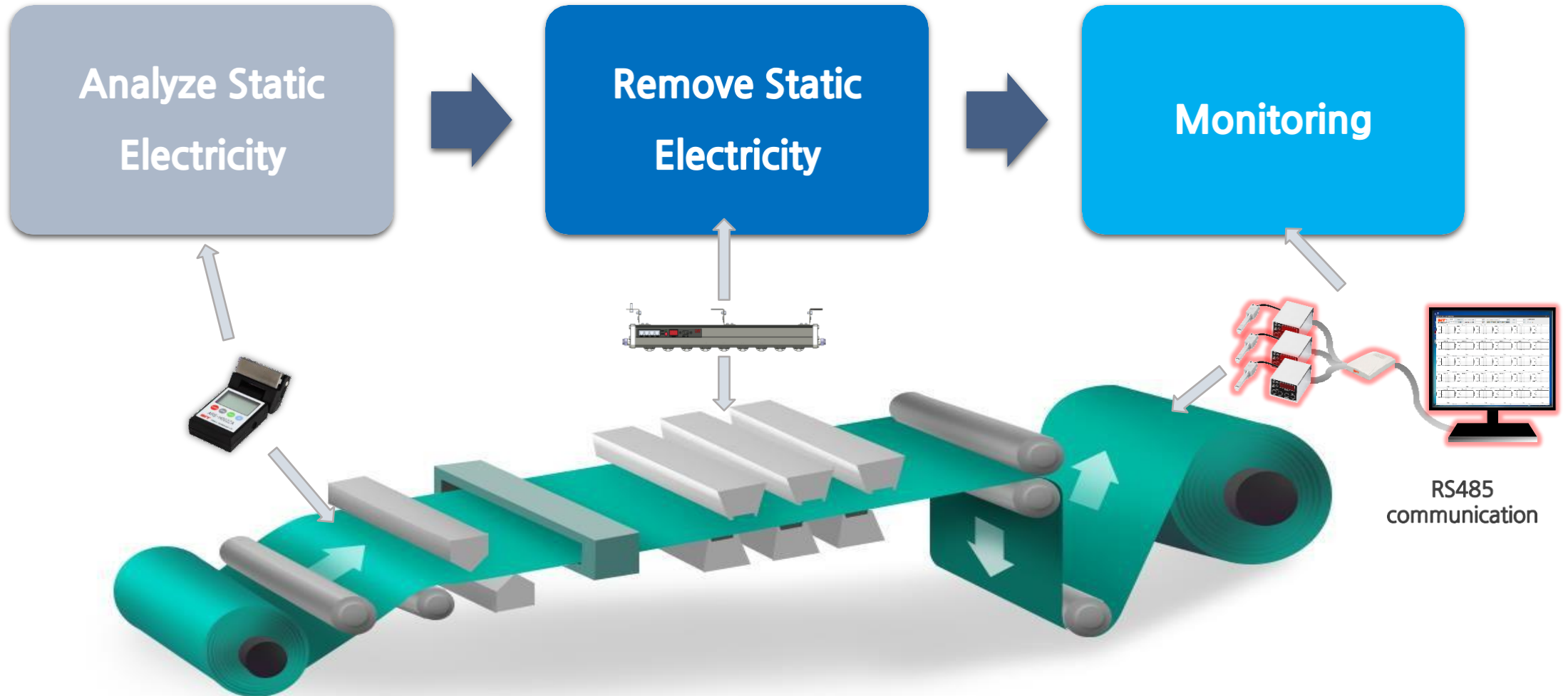
Type	Series	Sensor	Mode	Distance	Range	Resolution	Application
Hand-held Field meter	 ARS-H002ZA	Oscillating Chopper Type(DIT)	Precise mode	25mm(±0.5mm)	±2kV(±10%)	10V (-9.99kV~+9.99kV)	Measuring Both Electrostatic Level and Ion Balance Real time monitoring and data logging Function (USB communication)
			Expanded mode		±20kV(±10%)	100V (≤10.0 kV~≥10.0kV)	
			Ion Balance mode		±300V(±10%)	1V	
Stationary Field meter	 ARS-S005	Oscillating Chopper Type(DIT)	Precise mode	25mm(±0.5mm)	±2kV(±5%)	1V	Measuring Electrostatic Charging Status on the Target Surface Monitoring up to 30 units in real time with one computer (RS-485 communication)
			Expanded mode	50~100mm(±0.5mm)	±20kV(±10%)	10V	
Ion Balance Checker	 ARS-M002ZA	Oscillating Chopper Type(DIT)	Ion Balance mode	Measure according to the electrostatic discharge distance	±100V(±10%)	1V	Compact Size Real time Analog output (RS232communication)

Type	Series	Sensor	Mode	Accuracy	Time Resolution	Decay time (adjustable)	Application
Charged Plate Monitor	 ARC-P102ZA	Oscillating Chopper Type(DIT)	Ion Balance mode	Start/Stop Accuracy: ≤ setting value ±1V	0.1 sec / 0.1~999.9 sec	Start Voltage: 1~±1000 / 1V Stop Voltage: 0~±999 / 1V	Measuring Both Ion Balance and Decay Time It is possible to check and save a measured value on PC with free software (USB communication) Plate Handle Structure Compact controller Light weight & Portability
			Decay Time mode				

DIT Advantage

Static Electricity Monitoring/Control Solutions

DIT Develops and manufactures entirely with pure DIT technology, offering a complete line-up of static electricity monitoring and control solutions.

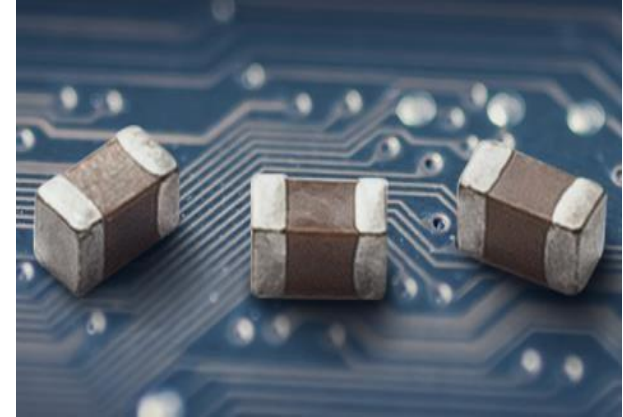


ESD Application

Semiconductors



MLCC and Precision components



ESD Application



PCB



Secondary battery



Benefits



Improved Portability

Minimized structure



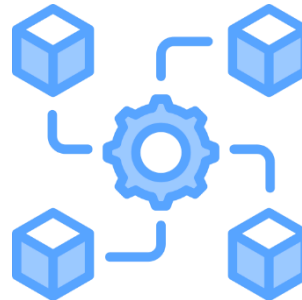
R&D Capability

Manufactures the entire process.
Strong capability of technical response



High Accuracy

High Accuracy for measuring ESD environments



Complete Line-up

Diverse Line-up available to suit different environments



Free Software

Real Time Monitoring in Computer



Competitive Price

We are offering competitive price to customers

ELECTRICAL PARTICULATE FILTER



DIT E.P.F

ELECTRICAL PARTICULATE FILTER

ELECTRICAL PARTICULATE FILTER

- feature

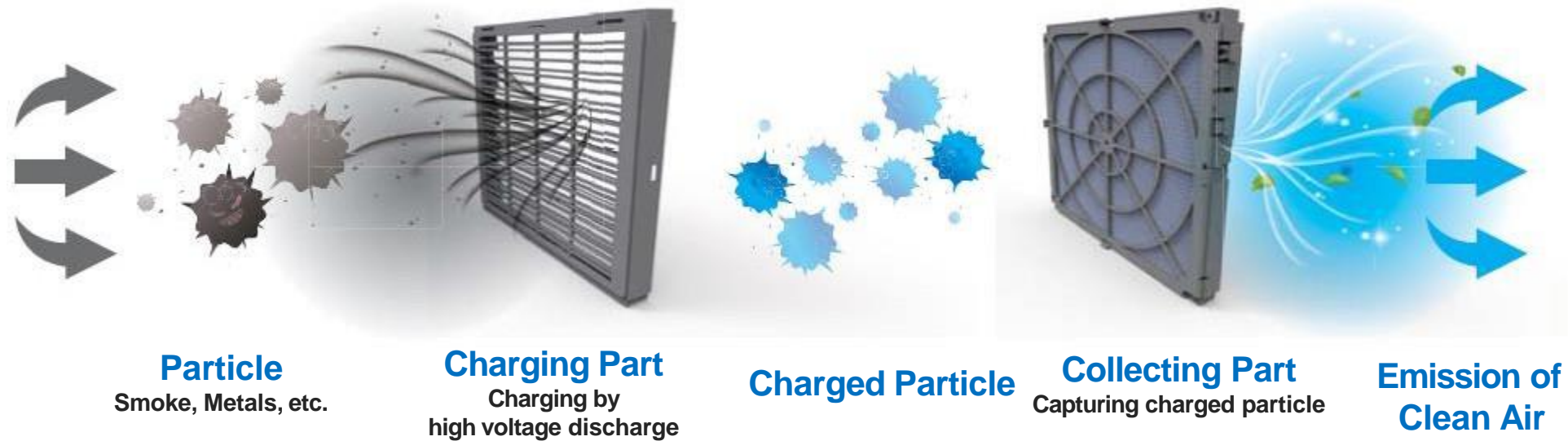
- ✓ Powerful dust removal capability and high breathability **Electric particulate filter**
- ✓ Installed and used in areas with contamination issues in cleanrooms, equipment, etc. (**repla**
for HEPA filters)
- ✓ Capable of collecting all types of dust and preventing the **re-entrainment of collected dust**



- Specification

	VQ3-225X1 Series			VQ3-100X1
	1 Cell	2 Cells	3 Cells	1 Cells
Input Voltage	12VDC or 24VDC			24VDC
Input Current (Filter+Fan)	Max 1.25±0.15A	Max 2.50±0.30A	Max 3.75±0.45A	Under 400mA
Dust Collecting Rate	0.3um - 92.0%~99.5% / 0.5um - 94.0%~99.5% / 1.0um - 99.5%			
Size(mm)	272*312*45 272*312*80(Fan)	272*580*45 272*580*80(Fan)	272*848*45 272*848*80(Fan)	175* 140* 80

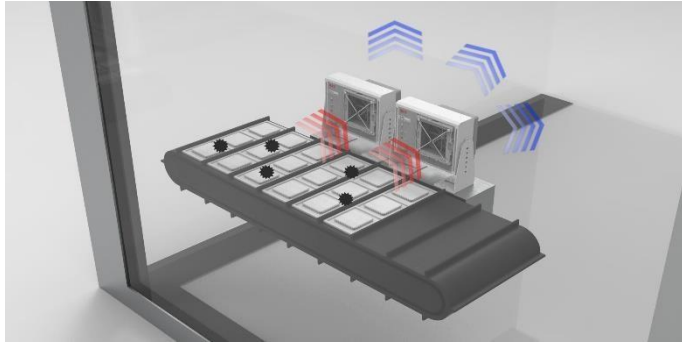
How it works



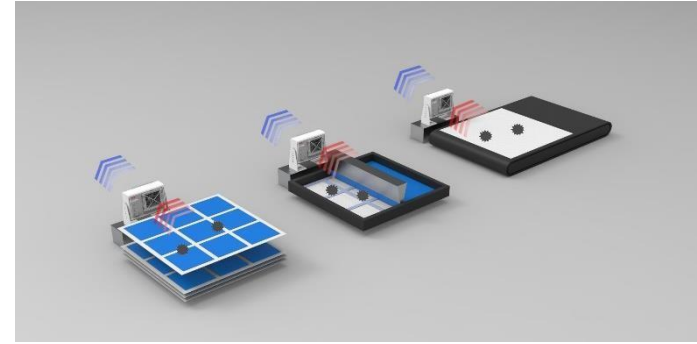
E.P.F is a method in which a positive(+) or negative(-) charge is applied to the particles using corona discharge by direct current high voltage so that they are collected to the opposite polarity of the dust collecting part

E.P.F Application

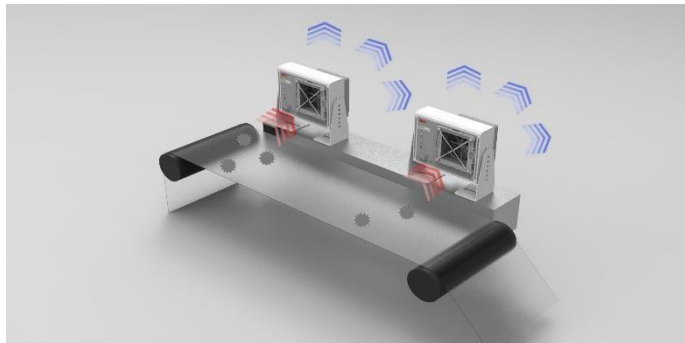
Semiconductors



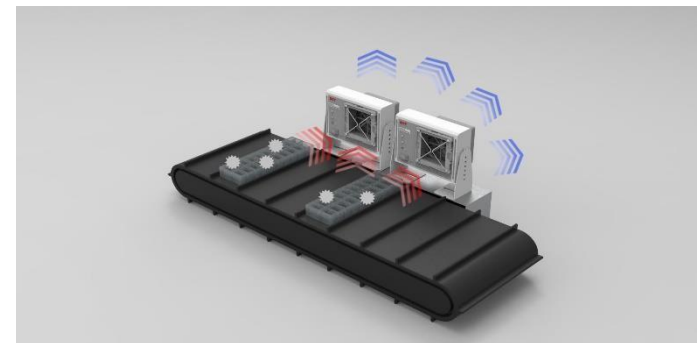
MLCC



Film manufacturing



**Pharmaceutical/food packaging
process**



Benefits



Semi-Permanent

Washable and Reusable



Low Noise

Minimized Fan Noise



Efficient Energy Use

Low-power product design



Excellent Dust Removal

Excellent Purification Performance with Minimal Airflow Loss

Customers

Semiconductor

SAMSUNG



TechWing



Semiconductor

Display

SAMSUNG DISPLAY



etc



**SAMSUNG
ELECTRO-MECHANICS**



SAMSUNG SDI





Thank you!

DONG IL TECHNOLOGY LTD.

**Address : 28, Namyang-ro 930beon-
gil, Namyang-eup, Hwaseong-si,
Gyeonggi-do, Republic of Korea**

Tel : +82-31-299-5454