



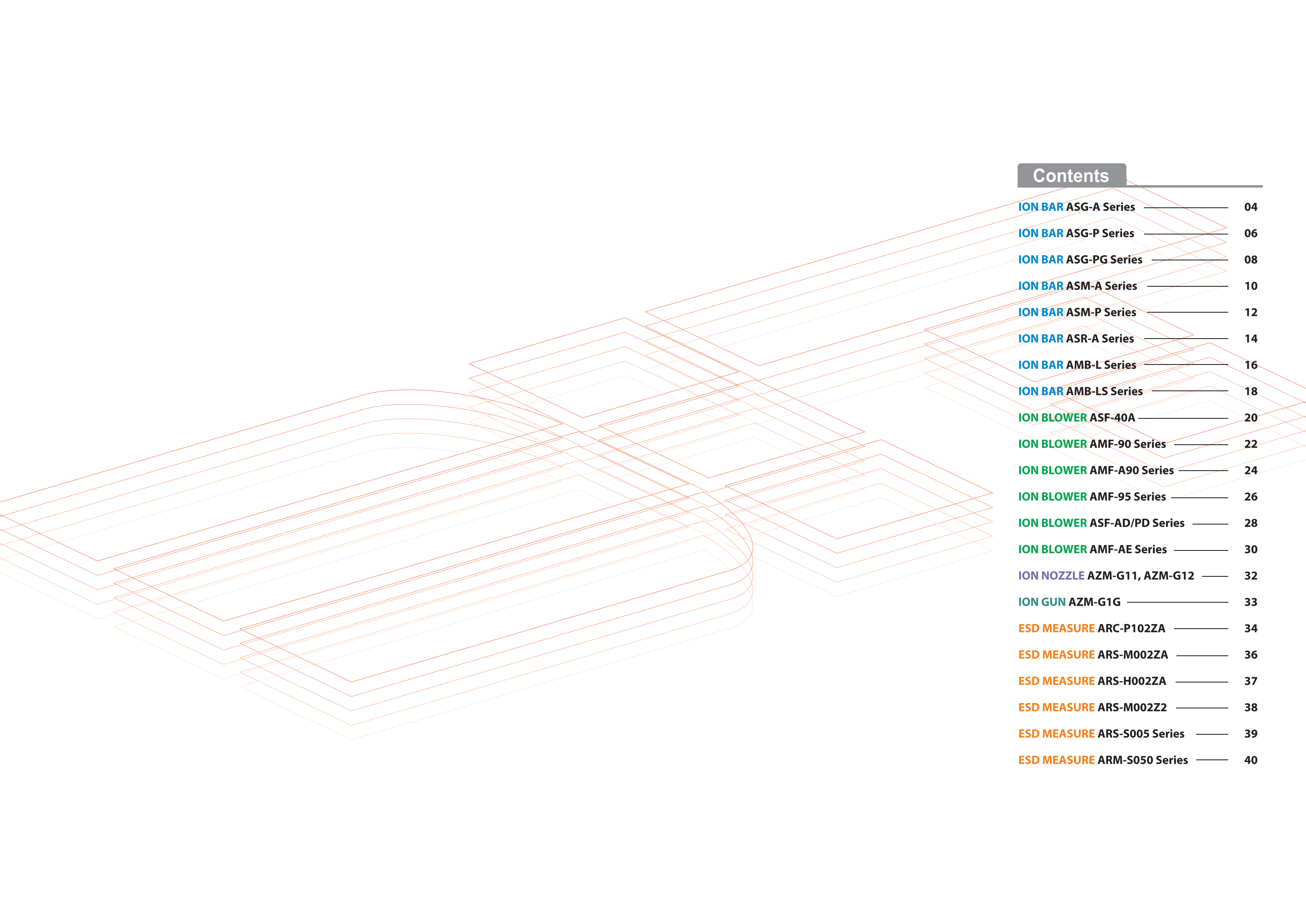
DONG IL TECHNOLOGY LTD.



ESD SOLUTION



www.dongiltech.co.kr



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ION BAR

ASG-A Series



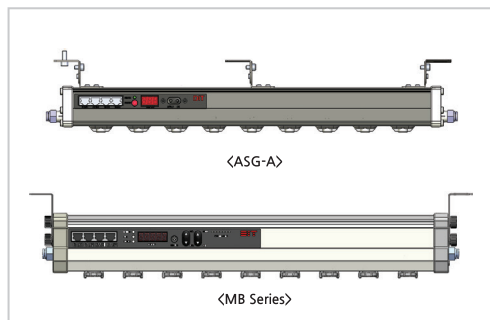
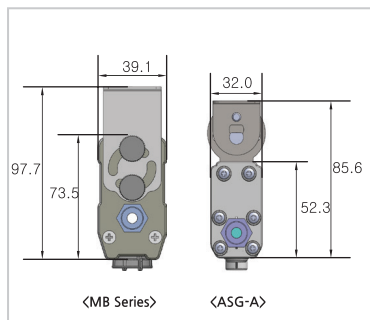
제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 300mA
소비 전력 (Power consumption)	Max. 7W
방전 전압 (Emitter voltage)	±4.75kV~±5.5kV (4 level adjustable)
출력 주파수 (Output frequency)	0.1Hz ~ 60Hz (Adjustable)
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	Pulsed AC
재 질 (Material)	Body : ABS / Emitter pins : Tungsten
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
계전 거리 (Coverage distance)	200mm ~ 2000mm
공급 에어 (Air)	종 류 (Type) CDA(Clean dry air), N2
	압 력 (Pressure) 0.05 ~ 0.5 MPa (Usually under 0.3MPa)
	유 량 (Flow) / Per 1 emitter 2L/min(±10%) [Under 0.1MPa]
	공급튜브 직경 (Air tube diameter) Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.005ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122℉)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

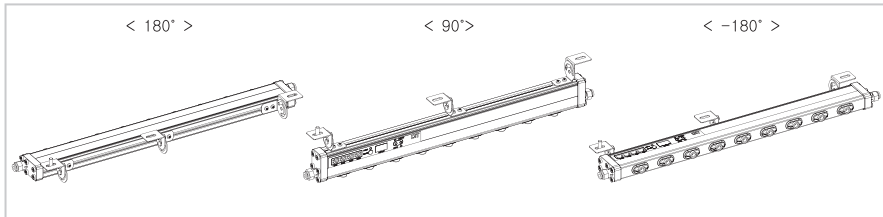
MB Series 대비 단면적 40% 감소 Cross-Sectional Area Reduced by 40% Comparing MB Series



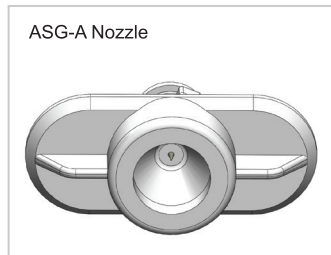
MB Series 대비 부피 및 중량이 현저히 감소하여 좁은 공간에서도 설치가 용이합니다.
Easy to install even in narrow space due to remarkably reduced size and weight.

자유로운 설치 180 Degree Rotation

전용 브래킷 사용으로 설치가 더욱 자유로워 졌습니다.
기존 상하 조절 각도 120°에서 180°로 개선하여 보다 자유로운 설치가 가능해 졌습니다.
New brackets, which is able to tilt 180 degree vertically, provide more freedom in installation.



Low Maintenance



최적의 노즐 설계로 Air 소모량을 줄이면서 이물질의 생성을 최소화 합니다.
Special nozzle is designed to reduce air supply requirement and minimize pollutant production and accumulation on emitter pin.

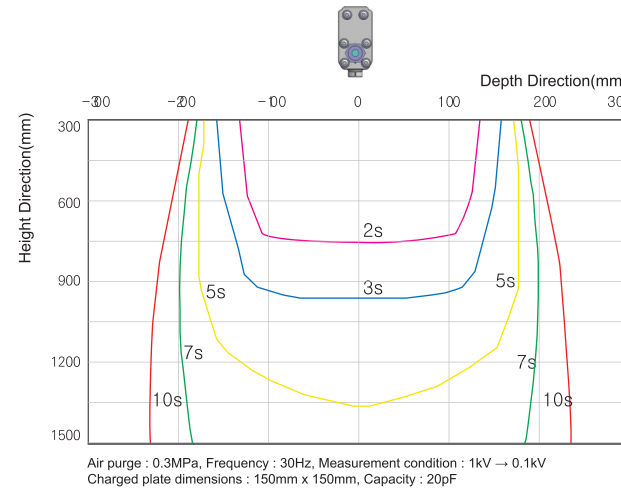
노즐의 Air 소모량을 줄이면서 방전핀 침단부에 이물 부착을 최소화 할 수 있는 Aerodynamic 구조 설계
Special nozzle is designed using aerodynamics.

*** 노즐당 Air 소모량**
Air supply requirement per emitter
0.3MPa Approx 5.1 ℓ/min
0.1MPa Approx 2.0 ℓ/min

ION BAR

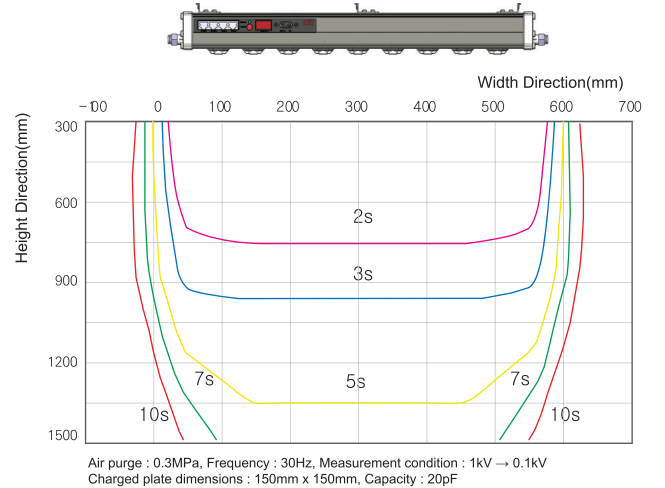
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



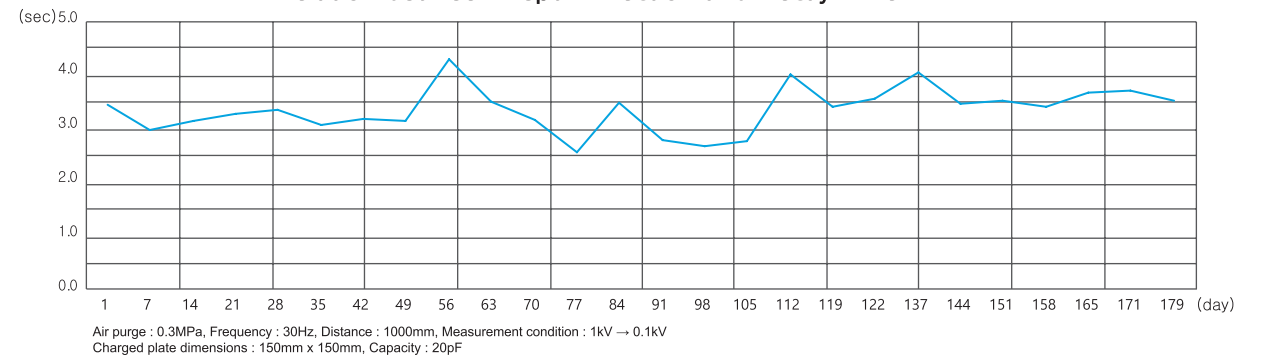
Air purge : 0.3MPa, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air purge : 0.3MPa, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

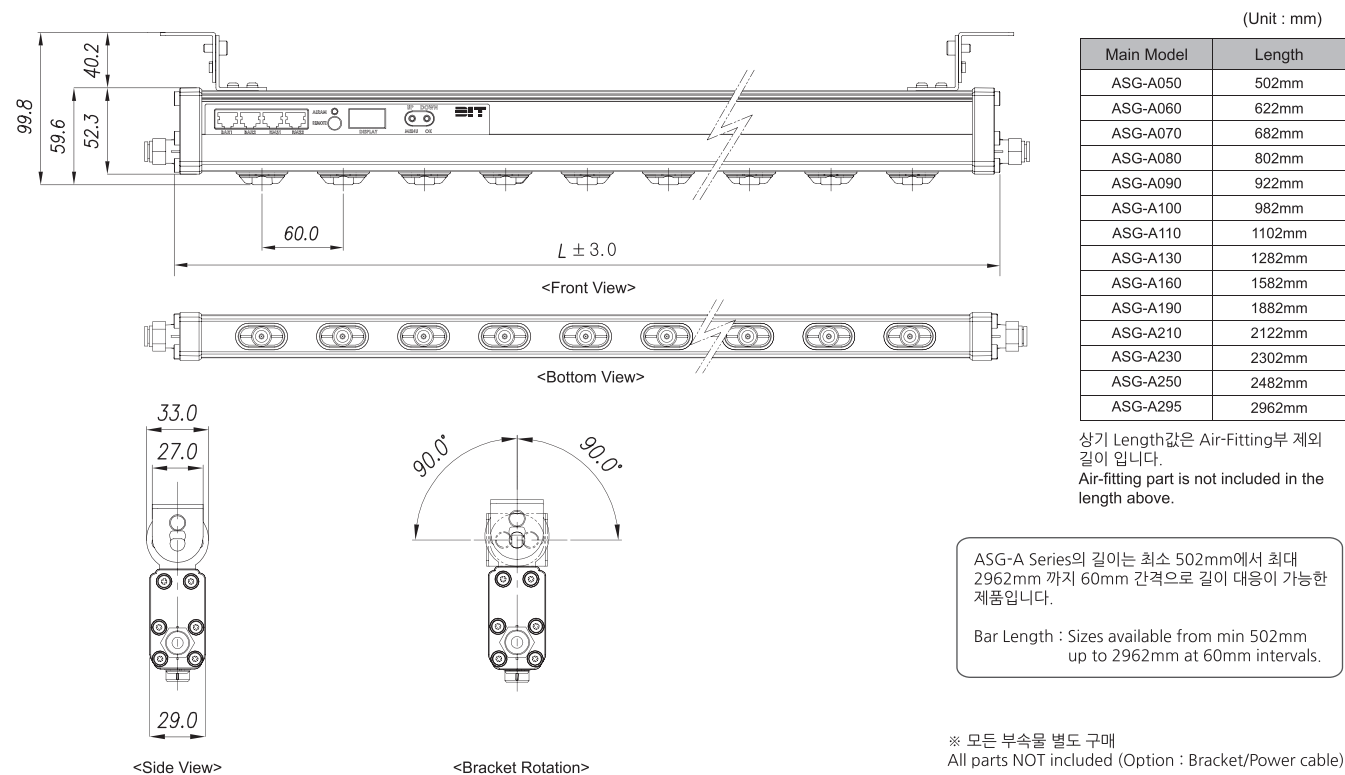
Relation between Depth Direction and Decay Time



Air purge : 0.3MPa, Frequency : 30Hz, Distance : 1000mm, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



ION BAR

ASG-P Series



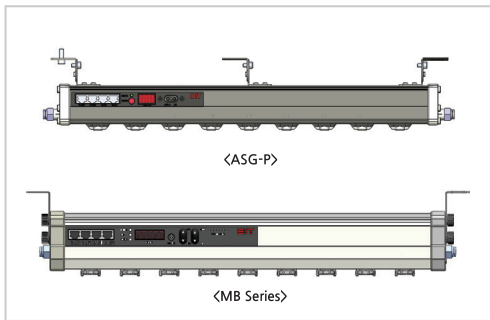
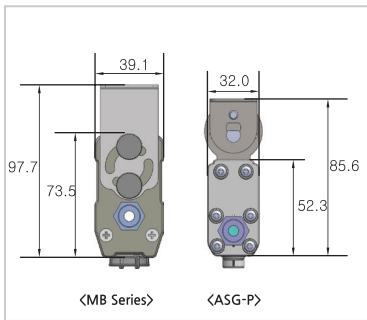
제품사양 / Product Specification

Category	Specification	
입력 전압 (Input voltage)	DC 24V± 10%	
입력 전류 (Input current)	Max. 900mA	
소비 전력 (Power consumption)	Max. 22W	
방전 전압 (Emitter voltage)	±4.7kV (±5%)	
출력 주파수 (Output frequency)	29kHz	
이온 발생 방식 (Ion generating method)	Corona discharge	
전압 인가 방식 (Voltage application method)	High-Frequency AC	
재 질 (Material)	Body : ABS / Emitter pins : Tungsten	
방전핀 교체 (Emitter replacement)	Replaceable	
이온 밸런스 (Ion balance)	Under average ±30V	
계전 거리 (Coverage distance)	100mm ~ 1000mm	
공급 에어 (Air)	종 류 (Type)	CDA(Clean dry air), N2
	압 력 (Pressure)	0.05 ~ 0.5 MPa (Usually under 0.3MPa)
	유 량 (Flow) / Per 1 emitter	2L/min(±10%) [Under 0.1MPa]
	공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.05ppm	
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122 F)	
사용습도 (Ambient humidity)	35~85%RH (No condensation)	

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제품장점 / Advantages

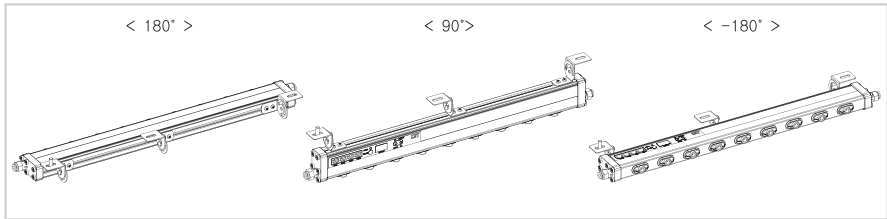
MB Series 대비 단면적 40% 감소 Cross-Sectional Area Reduced by 40% Comparing MB Series



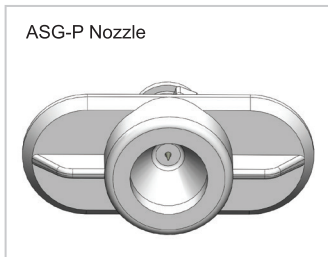
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Easy to install even in narrow space due to remarkably reduced size and weight.

자유로운 설치 180 Degree Rotation

전용 브라켓 사용으로 설치가 더욱 자유로워졌습니다.
기존 상하 조절 각도 120°에서 180°로 개선하여 보다 자유로운 설치가 가능해졌습니다.
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Low Maintenance



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Special nozzle is designed to reduce air supply requirement and minimize pollutant production and accumulation on emitter pin.

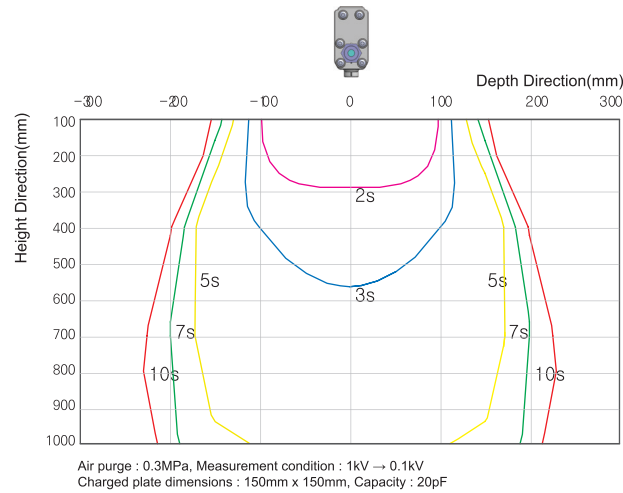
노즐의 Air 소모량을 줄이면서 방전핀 침단부에 이물 부착을 최소화 할 수 있는 Aerodynamic 구조 설계
Special nozzle is designed using aerodynamics.

*** 노즐당 Air 소모량**
Air supply requirement per emitter
0.3MPa Approx 5.1 ℓ/min
0.1MPa Approx 2.0 ℓ/min

ION BAR

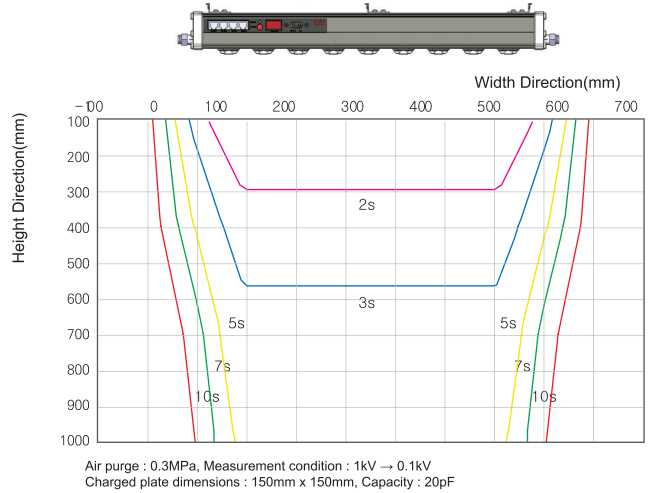
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



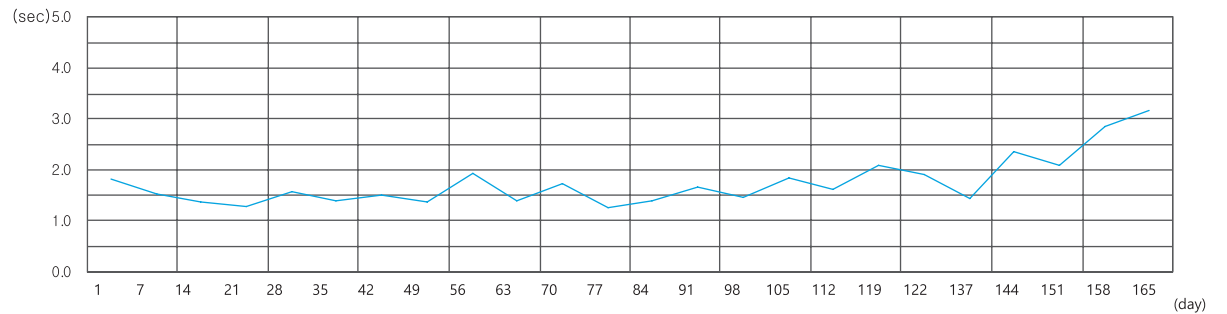
Air purge : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air purge : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

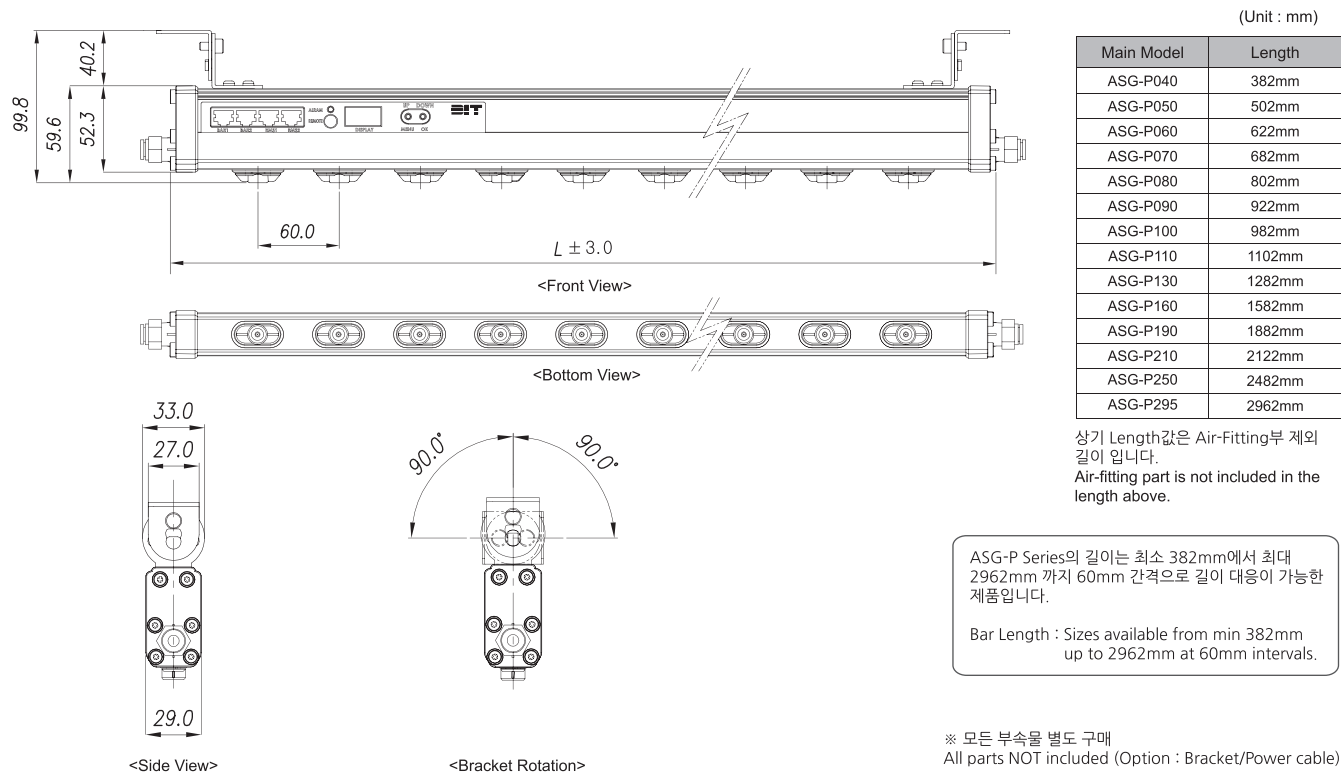
Relation between Depth Direction and Decay Time



Air purge : 0.3MPa, Distance : 300mm, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



ION BAR

ASG-PG Series



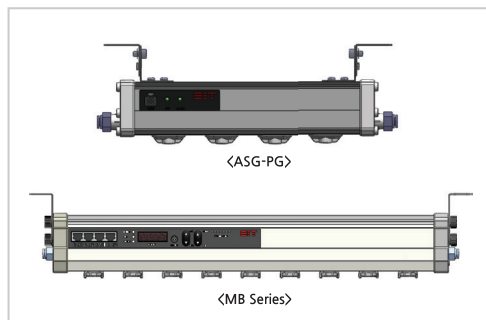
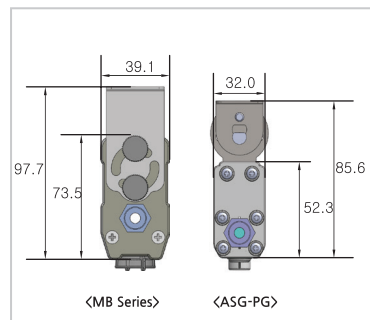
제품사양 / Product Specification

Category	Specification	
입력 전압 (Input voltage)	DC 24V± 10%	
입력 전류 (Input current)	Max. 900mA	
소비 전력 (Power consumption)	Max. 22W	
방전 전압 (Emitter voltage)	±4.7kV (±5%)	
출력 주파수 (Output frequency)	29kHz	
이온 발생 방식 (Ion generating method)	Corona discharge	
전압 인가 방식 (Voltage application method)	High-Frequency AC	
재 질 (Material)	Body : ABS / Emitter pins : Tungsten	
방전핀 교체 (Emitter replacement)	Replaceable	
이온 밸런스 (Ion balance)	Under average ±30V	
제전 거리 (Coverage distance)	100mm ~ 1000mm	
공급 에어 (Air)	종 류 (Type)	CDA(Clean dry air), N2
	압 력 (Pressure)	0.05 ~ 0.5 MPa (Usually under 0.3MPa)
	유 량 (Flow) / Per 1 emitter	2L/min(±10%) [Under 0.1MPa]
	공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.05ppm	
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122℉)	
사용습도 (Ambient humidity)	35~85%RH (No condensation)	

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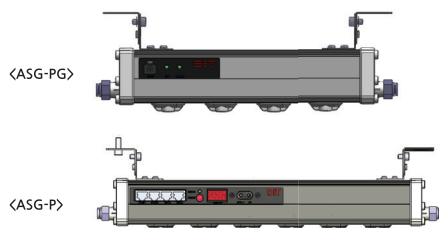
제품장점 / Advantages

MB Series 대비 단면적 40% 감소 Cross-Sectional Area Reduced by 40% Comparing MB Series



MB Series 대비 부피 및 중량이 현저히 감소하여 좁은 공간에서도 설치가 용이합니다.
Easy to install even in narrow space due to remarkably reduced size and weight.

ASG-P Series보다 짧은 길이 가능 / Shorter Length than ASG-P Series



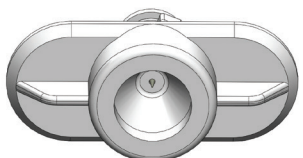
ASG-P Series에서 Display부를 제거 함으로써 262mm, 322mm 제작이 가능합니다.
The size of ASG-PG Series is available 262mm, 322mm by removing the FND display of ASG-P Series.

ASG-P Series의 경우, 최소 382mm부터 제작 가능
The size of ASG-P Series is available from min 382mm.

※ 단, RS485 통신 기능 없음
RS485 communication function is not available.

Low Maintenance

ASG-PG Nozzle



최적의 노즐 설계로 Air 소모량을 줄이면서 이물질의 생성을 최소화 합니다.
Special nozzle is designed to reduce air supply requirement and minimize pollutant production and accumulation on emitter pin.

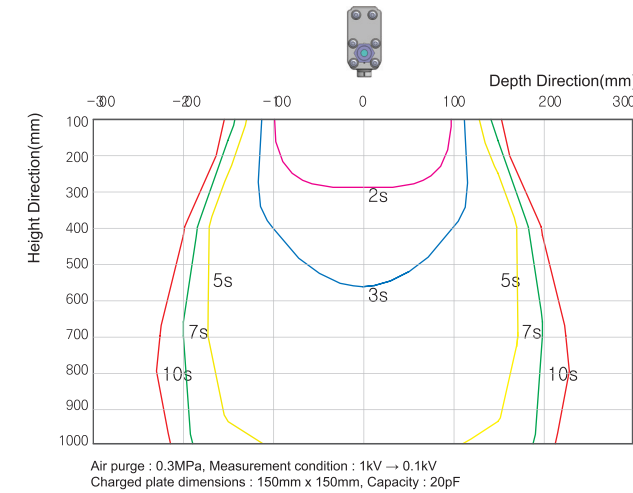
노즐의 Air 소모량을 줄이면서 방전핀 침단부에 이물질 부착을 최소화 할 수 있는 Aerodynamic 구조 설계
Special nozzle is designed using aerodynamics.

* 노즐당 Air 소모량
Air supply requirement per emitter
0.3MPa Approx 5.1 ℓ/min
0.1MPa Approx 2.0 ℓ/min

ION BAR

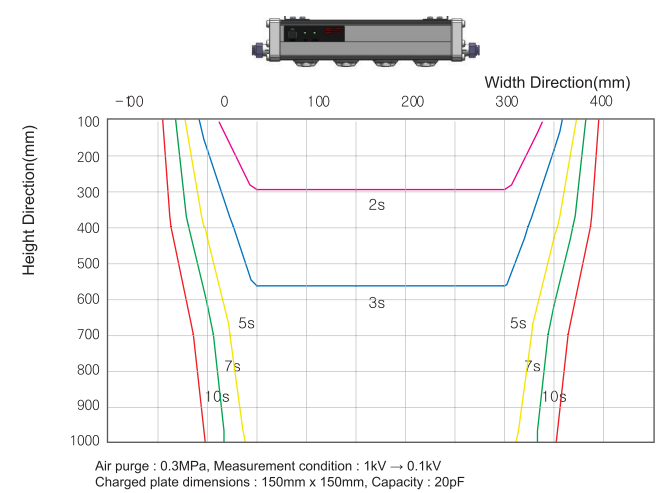
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



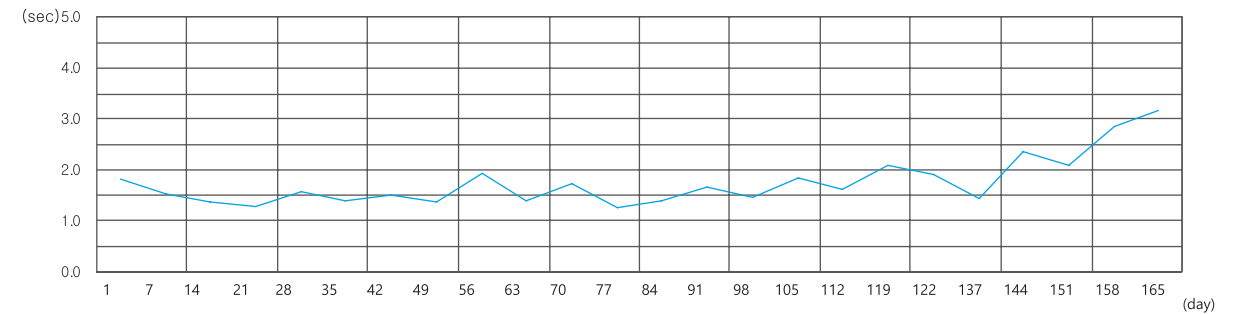
Air purge : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air purge : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Depth Direction and Decay Time

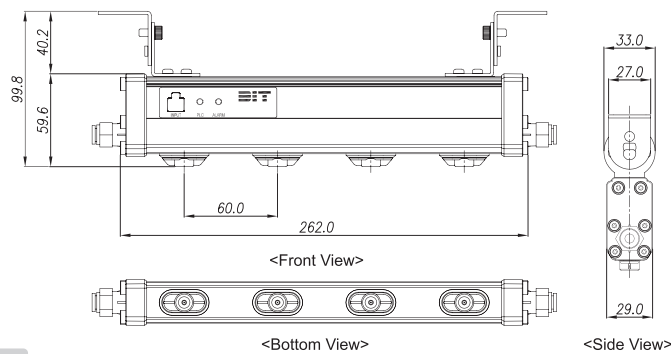


Air purge : 0.3MPa, Distance : 300mm, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

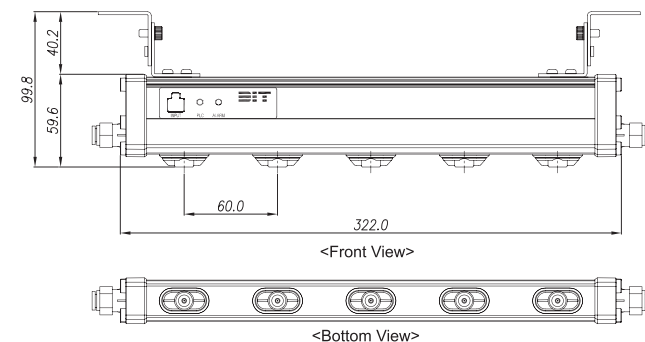
※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

ASG-P025G



ASG-P030G



(Unit : mm)

Main Model	Length
ASG-P025G	262mm
ASG-P030G	322mm

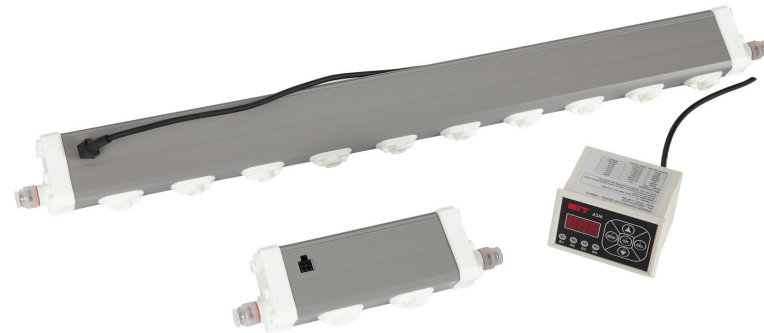
상기 Length값은 Air-Fitting부 제외 길이입니다.
Air-fitting part is not included in the length above.

ASG-PG Series의 길이는 262mm, 322mm 두 사이즈 제품입니다.
Bar Length : Sizes available 262mm, 322mm

※ 모든 부속물 별도 구매
All parts NOT included (Option : Bracket/Power cable)

ION BAR

ASM-A Series



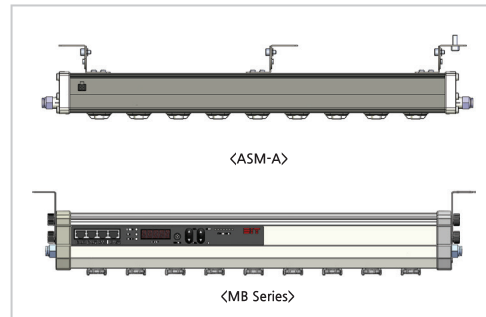
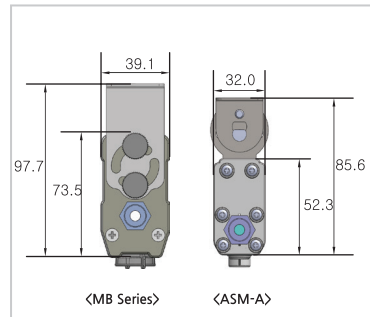
제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 300mA (Controller & Ionizer1ea) Max. 1A (Controller & Ionizer 4ea)
소비 전력 (Power consumption)	Max. 7W (Controller & Ionizer 1ea) Max. 24W (Controller & Ionizer 4ea)
방전 전압 (Emitter voltage)	±5.5kV
출력 주파수 (Output frequency)	1.0Hz ~ 60Hz (Adjustable)
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	Pulsed AC
재질 (Material)	Body : ABS / Emitter pins : Tungsten
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
제전 거리 (Coverage distance)	200mm ~ 2000mm
종류 (Type)	CDA(Clean dry air), N2
공급 에어 (Air)	압력 (Pressure) 0.05 ~ 0.5 MPa (Usually under 0.3MPa) 유량 (Flow) / Per 1 emitter 2L/min(±10%) [Under 0.1MPa]
공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.005ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

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제품장점 / Advantages

MB Series 대비 단면적 40% 감소 Cross-Sectional Area Reduced by 40% Comparing MB Series



MB Series 대비 부피 및 중량이 현저히 감소하여 좁은 공간에서도 설치가 용이합니다.
Easy to install even in narrow space due to remarkably reduced size and weight.

컨트롤러 분리형 Controller Separated Type

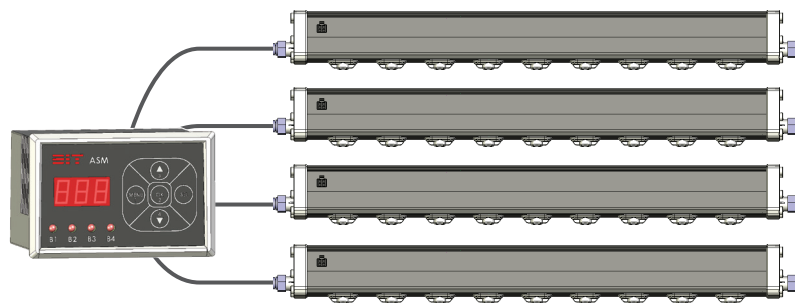
컨트롤러 분리형으로 장비 외부패널에 장착(계장)가능
장비/설비의 Control-Panel부에 제전기 컨트롤러를 설치하여,
설치된 BAR에 대한 각종 Setting 및 Alarm발생여부를
손쉽게 변경 및 확인할 수 있습니다.

Separated controller can be installed on exterior of equipments.

Easy to set and monitor the bar status with the separated controller installed around the control-panel of equipments.

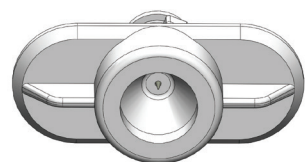
컨트롤러 1대에 최대 4Set까지 연결이 가능합니다.

Able to connect up to 4 bars per 1 controller.



Low Maintenance

ASM-A Nozzle



최적의 노즐 설계로 Air 소모량을 줄이면서 이물질의 생성을 최소화 합니다.
Special nozzle is designed to reduce air supply requirement and minimize pollutant production and accumulation on emitter pin.

노즐의 Air 소모량을 줄이면서 방전핀 첨단부에 이물질 부착을 최소화 할 수 있는 Aerodynamic 구조 설계
Special nozzle is designed using aerodynamics.

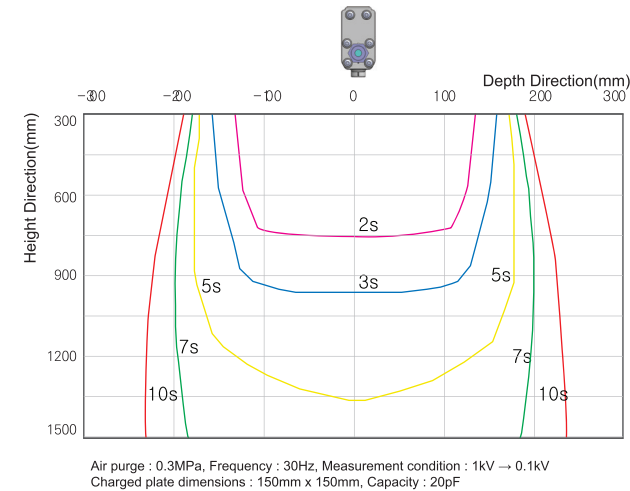
* 노즐당 Air 소모량

Air supply requirement per emitter
0.3MPa Approx 5.1 ℓ/min
0.1MPa Approx 2.0 ℓ/min

ION BAR

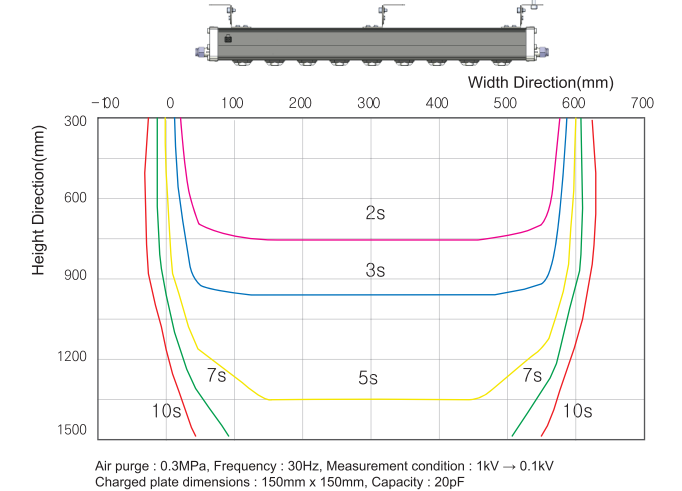
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



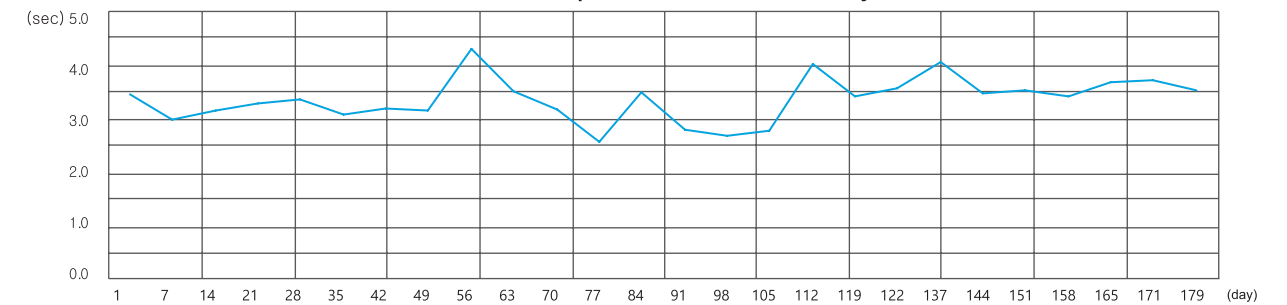
Air purge : 0.3MPa, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air purge : 0.3MPa, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

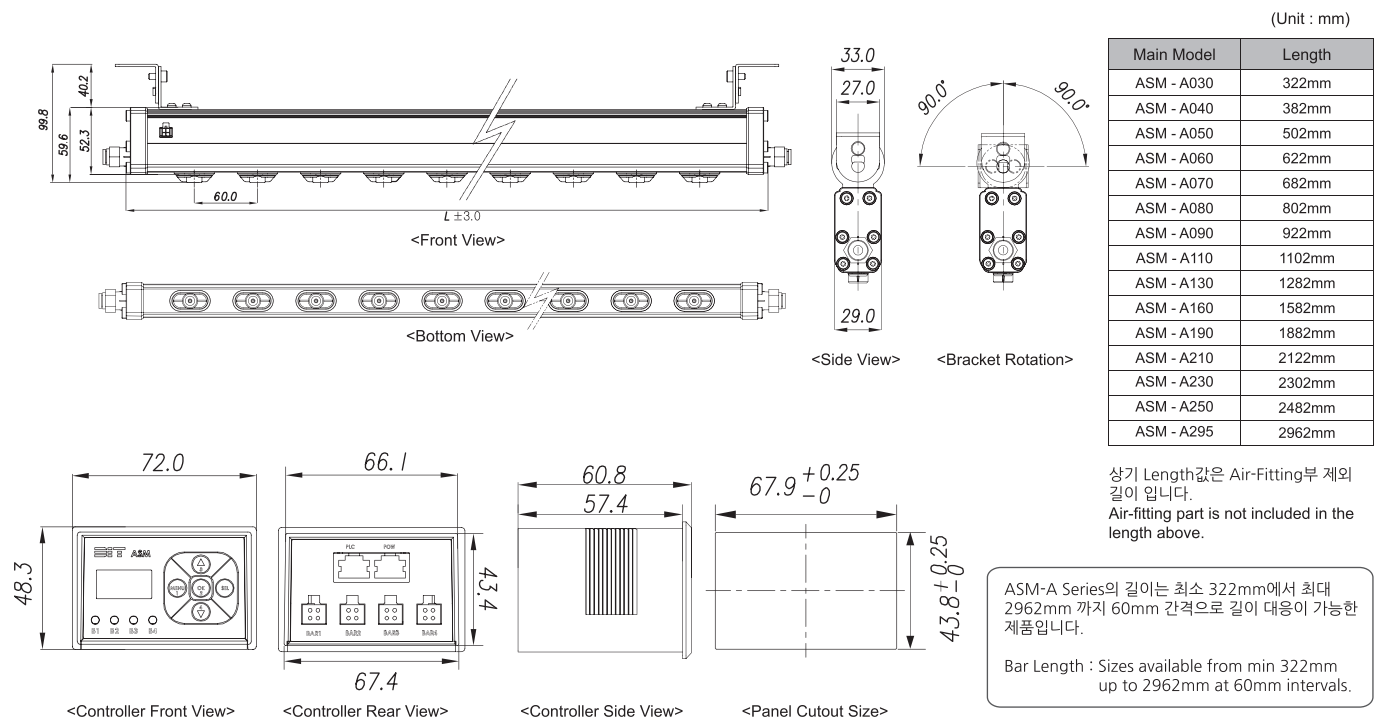
Relation between Depth Direction and Decay Time



Air purge : 0.3MPa, Frequency : 30Hz, Distance : 1000mm, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



상기 Length값은 Air-Fitting부 제외 길이입니다.
Air-fitting part is not included in the length above.

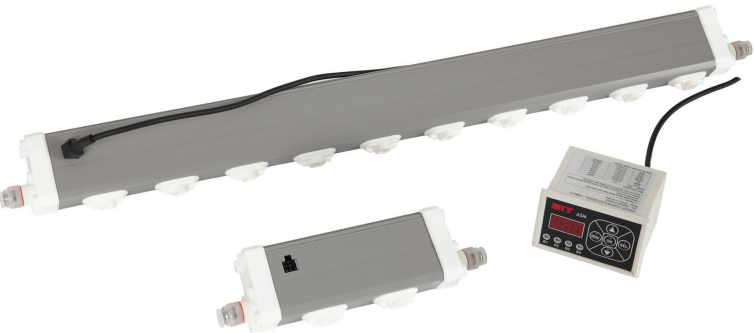
ASM-A Series의 길이는 최소 322mm에서 최대 2962mm 까지 60mm 간격으로 길이 대응이 가능한 제품입니다.

Bar Length : Sizes available from min 322mm up to 2962mm at 60mm intervals.

※ 모든 부속물 별도 구매
All parts NOT included
(Option : Bracket/Power cable/Outer controller etc)

ION BAR

ASM-P Series



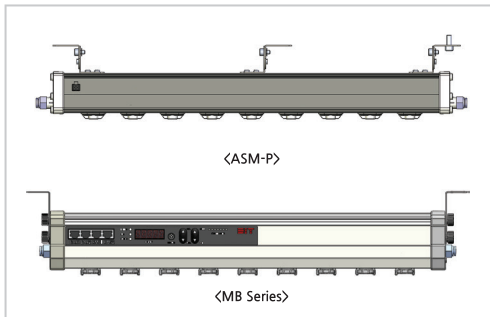
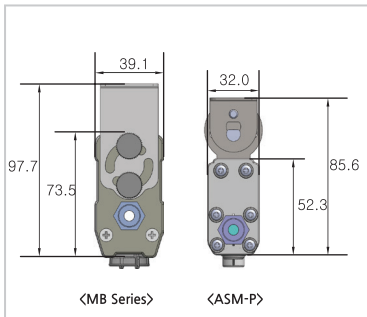
제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 900mA (Controller & Ionizer 1ea) Max. 3A (Controller & Ionizer 4ea)
소비 전력 (Power consumption)	Max. 22W (Controller & Ionizer 1ea) Max. 72W (Controller & Ionizer 4ea)
방전 전압 (Emitter voltage)	±4.7kV(±5%)
출력 주파수 (Output frequency)	29kHz (Adjustable)
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	High-Frequency AC
재 질 (Material)	Body : ABS / Emitter pins : Tungsten
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
제전 거리 (Coverage distance)	100mm ~ 1000mm
종 류 (Type)	CDA(Clean dry air), N2
압 력 (Pressure)	0.05 ~ 0.5 MPa (Usually under 0.3MPa)
유 량 (Flow) / Per 1 emitter	2L/min(±10%) [Under 0.1MPa]
공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.05ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122℉)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

MB Series 대비 단면적 40% 감소 Cross-Sectional Area Reduced by 40% Comparing MB Series



MB Series 대비 부피 및 중량이 현저히 감소하여 좁은 공간에서도 설치가 용이합니다.
Easy to install even in narrow space due to remarkably reduced size and weight.

컨트롤러 분리형 Controller Separated Type

컨트롤러 분리형으로 장비 외부패널에 장착(계장)가능
장비/설비의 Control-Panel부에 제전기 컨트롤러를 설치하여,
설치된 BAR에 대한 각종 Setting 및 Alarm발생여부를
손쉽게 변경 및 확인할 수 있습니다.

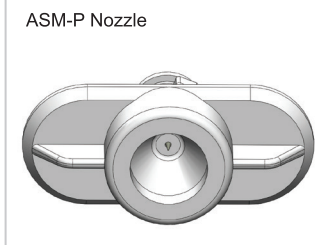
Separated controller can be installed on exterior of equipments.

Easy to set and monitor the bar status with the separated controller installed around the control-panel of equipments.

컨트롤러 1대에 최대 4Set까지 연결이 가능합니다.

Able to connect up to 4 bars per 1 controller.

Low Maintenance



최적의 노즐 설계로 Air 소모량을 줄이면서 이물질의 생성을 최소화 합니다.
Special nozzle is designed to reduce air supply requirement and minimize pollutant production and accumulation on emitter pin.

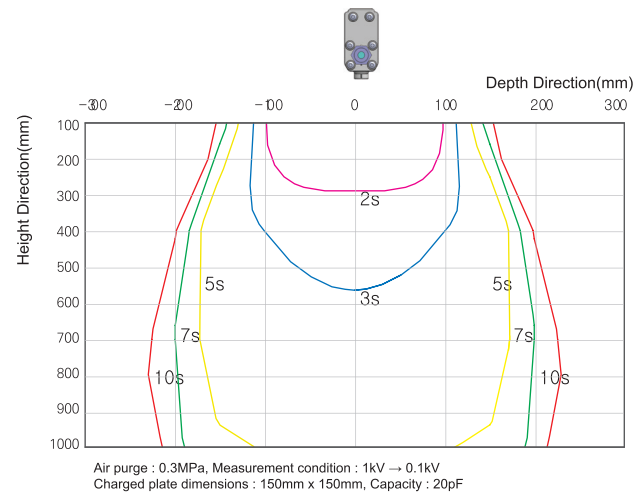
노즐의 Air 소모량을 줄이면서 방전핀 첨단부에 이물질 부착을 최소화 할 수 있는 Aerodynamic 구조 설계
Special nozzle is designed using aerodynamics.

* 노즐당 Air 소모량
Air supply requirement per emitter
0.3MPa Approx 5.1 ℓ/min
0.1MPa Approx 2.0 ℓ/min

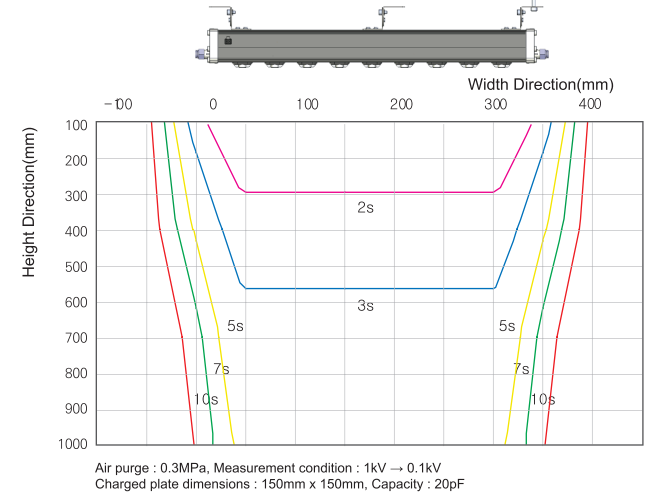
ION BAR

제품성능 / Product Performances

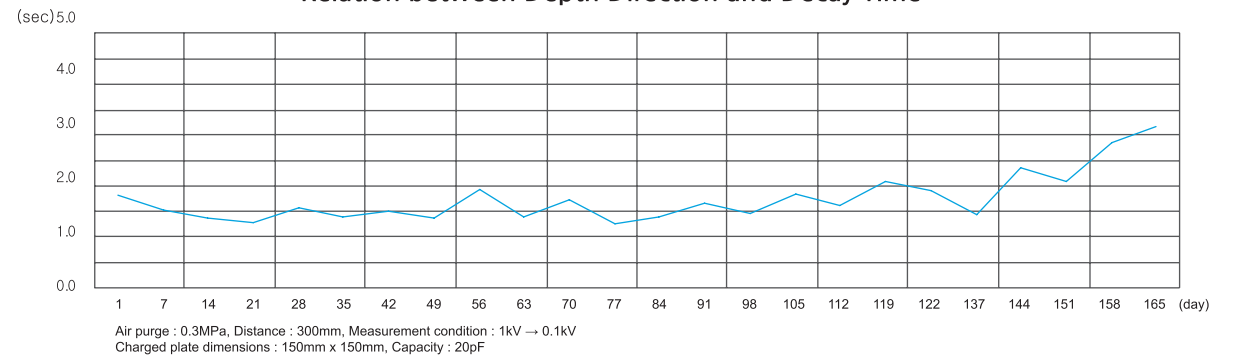
Relation between Depth Direction and Decay Time



Relation between Width Direction and Decay Time

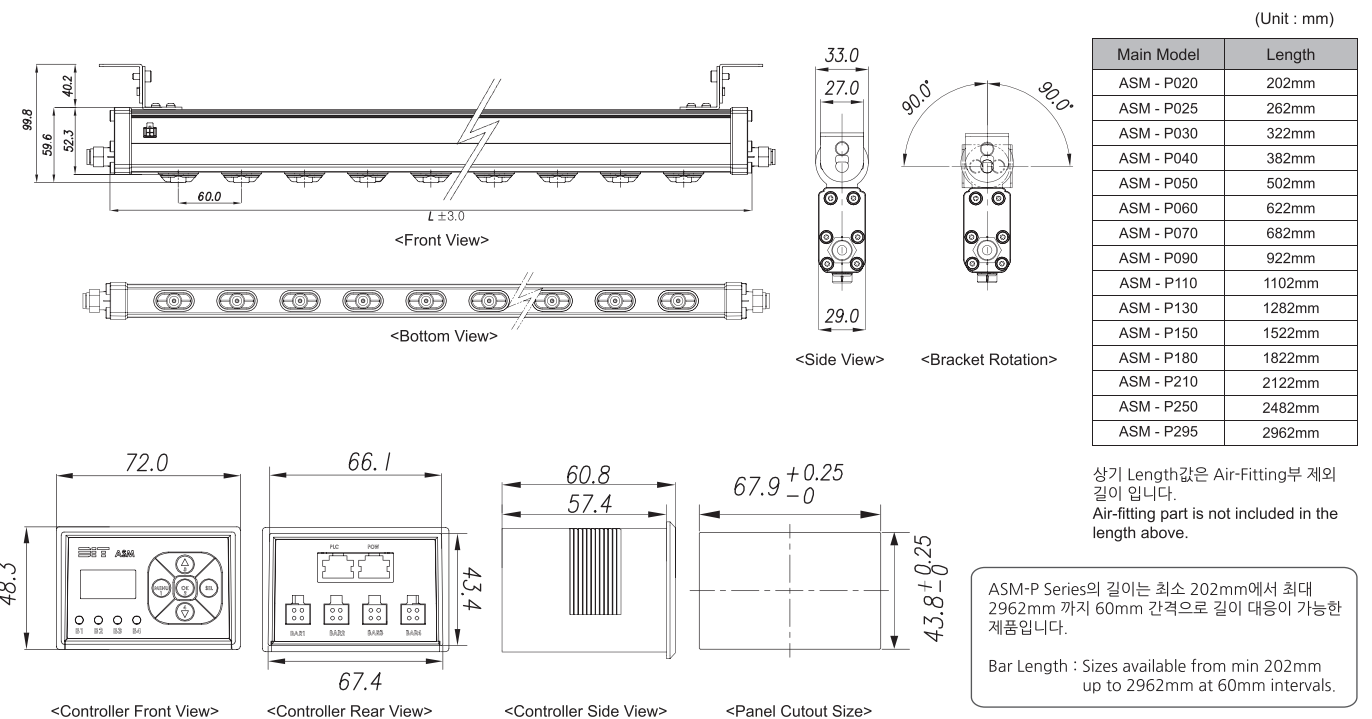


Relation between Depth Direction and Decay Time



※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



상기 Length값은 Air-Fitting부 제외 길이입니다.
Air-fitting part is not included in the length above.

ASM-P Series의 길이는 최소 202mm에서 최대 2962mm 까지 60mm 간격으로 길이 대응이 가능한 제품입니다.

Bar Length : Sizes available from min 202mm up to 2962mm at 60mm intervals.

※ 모든 부속물 별도 구매
All parts NOT included
(Option : Bracket/Power cable/Outer controller etc)

ION BAR

ASR-A Series

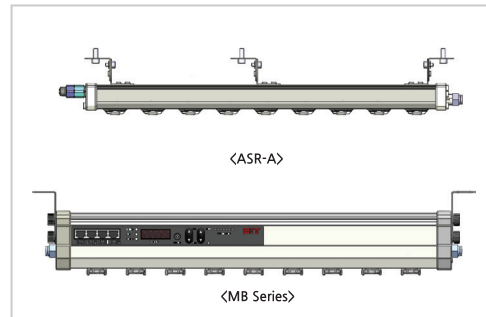
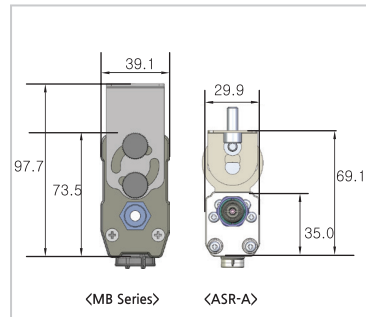
제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 300mA (Controller & Ionizer 1ea) Max. 1A (Controller & Ionizer 4ea)
소비 전력 (Power consumption)	Max. 7W (Controller & Ionizer 1ea) Max. 24W (Controller & Ionizer 4ea)
방전 전압 (Emitter voltage)	±5.5kV
출력 주파수 (Output frequency)	1.0Hz ~ 30Hz (Adjustable)
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	Pulsed AC
재질 (Material)	Body : ABS / Emitter pins : Tungsten
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
제전 거리 (Coverage distance)	200mm ~ 2000mm
종류 (Type)	CDA(Clean dry air), N2
공급 에어 (Air)	
압력 (Pressure)	0.05 ~ 0.5 MPa (Usually under 0.3MPa)
유량 (Flow) / Per 1 emitter	2L/min(±10%) [Under 0.1MPa]
공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.005ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

MB Series 대비 단면적 40% 감소 Cross-Sectional Area Reduced by 40% Comparing MB Series



MB Series 대비 부피 및 중량이 현저히 감소하여 좁은 공간에서도 설치가 용이합니다.
Easy to install even in narrow space due to remarkably reduced size and weight.

Bar / HVPS Power-Pack / Controller Separated Type

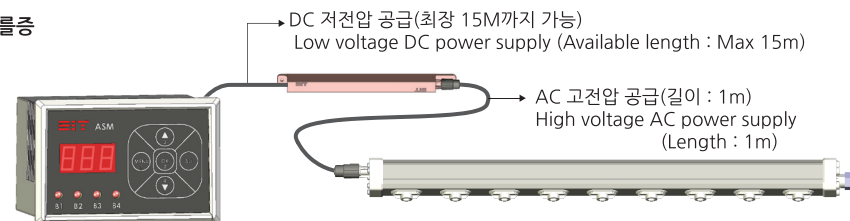
Bar에 내장되어 있던 Controller부와 HVPS부를 별도로 분리함으로써 Controller에서 Bar까지의 연결 가능거리를증가시켜 설치의 자유도를 높였습니다.

Total connectable length is increased by separating the controller and the HVPS.

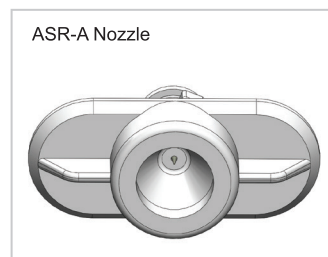
It gives more freedom in installation.

※ HVPS : High Voltage Power Supply

컨트롤러 1대에 최대 4Set까지 연결이 가능합니다.
Able to connect up to 4 bars per 1 controller.



Low Maintenance



최적의 노즐 설계로 Air 소모량을 줄이면서 이물질의 생성을 최소화 합니다.
Special nozzle is designed to reduce air supply requirement and minimize pollutant production and accumulation on emitter pin.

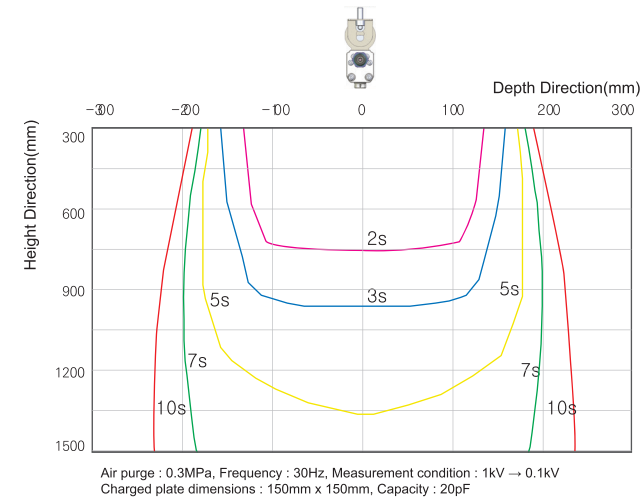
노즐의 Air 소모량을 줄이면서 방전핀 첨단부에 이물질 부착을 최소화 할 수 있는 Aerodynamic 구조 설계
Special nozzle is designed using aerodynamics.

* 노즐당 Air 소모량
Air supply requirement per emitter
0.3MPa Approx 5.1 ℓ/min
0.1MPa Approx 2.0 ℓ/min

ION BAR

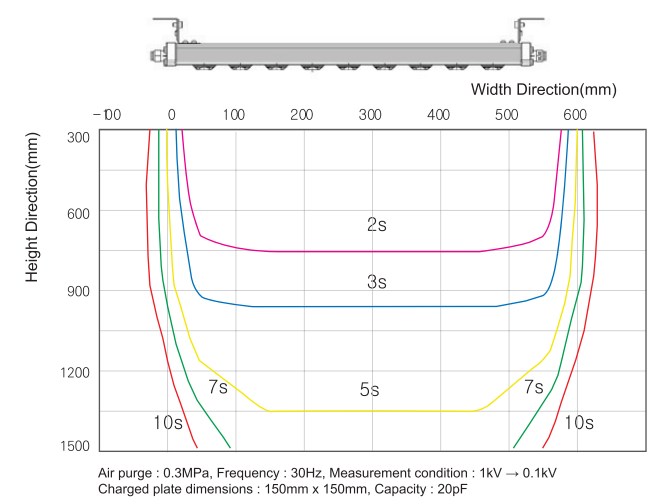
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



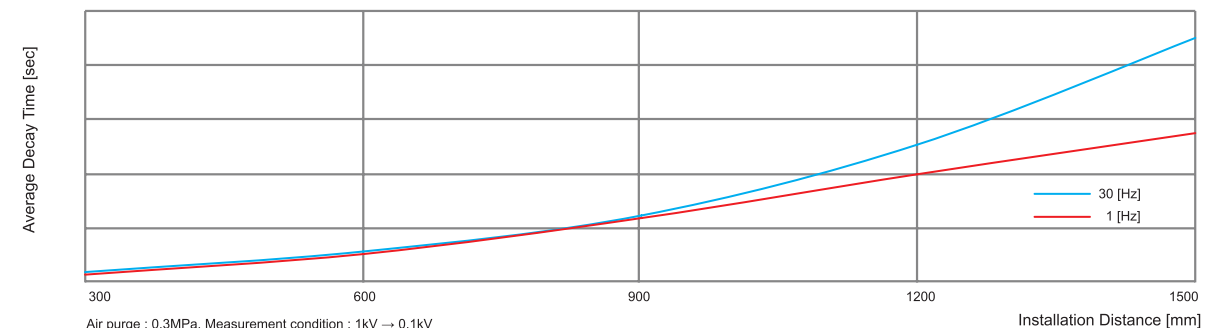
Air purge : 0.3MPa, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air purge : 0.3MPa, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

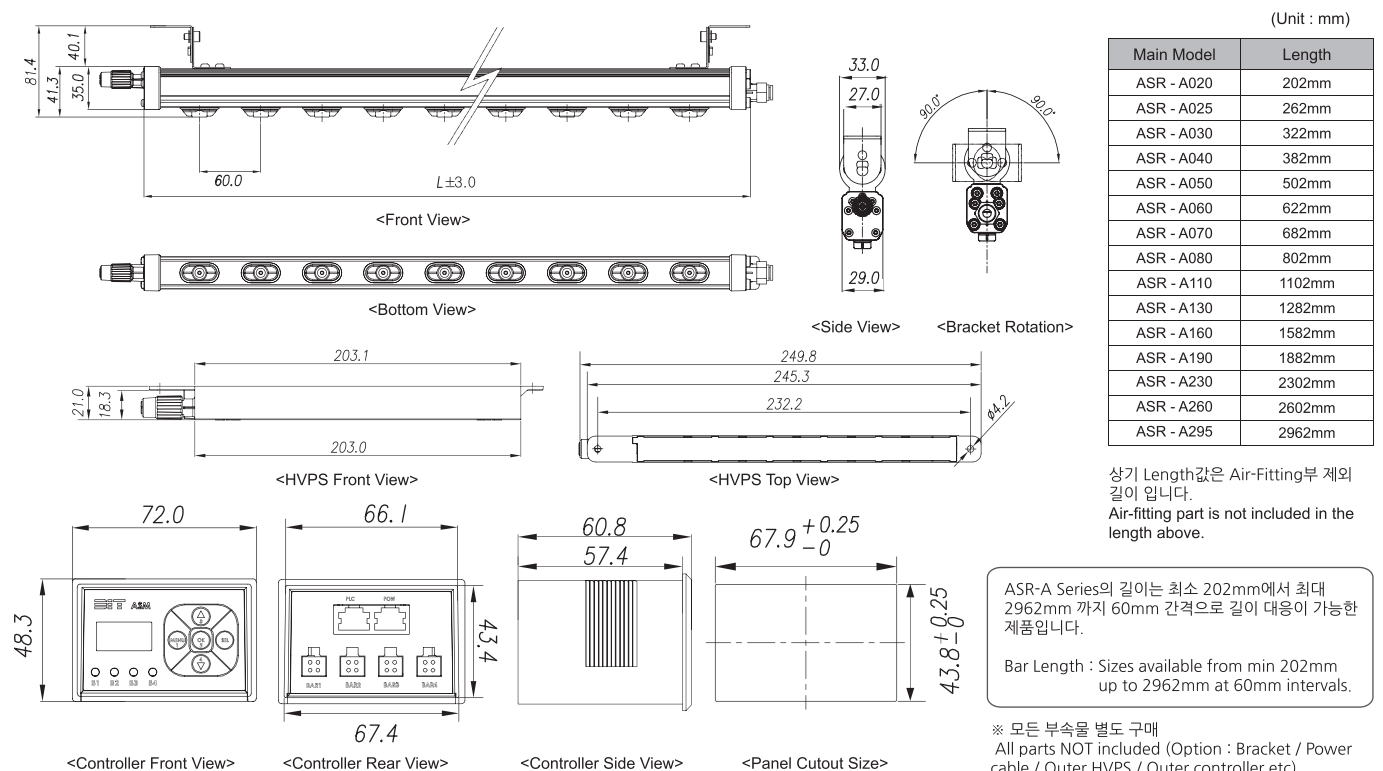
Relation between Distance and Decay Time



Air purge : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



ION BAR

AMB-L Series

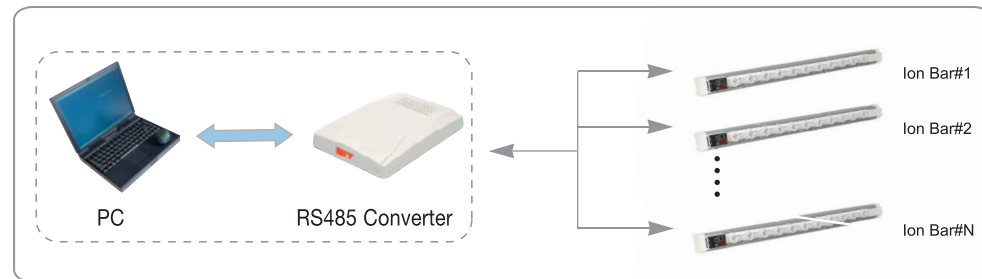
제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 300mA
소비 전력 (Power consumption)	Max. 7W
방전 전압 (Emitter voltage)	±6.5kV
출력 주파수 (Output frequency)	0.5Hz ~ 10Hz (Adjustable)
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	Pulsed AC
재질 (Material)	Body : ABS / Emitter pins : Titanium
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
계전 거리 (Coverage distance)	200mm ~ 1500mm
오존발생량 (Ozone generation)	Under 0.005ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122 ℉)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

전원 및 통신(RS485)시리즈 연결 Connecting AMB-L Series to Power and RS-485



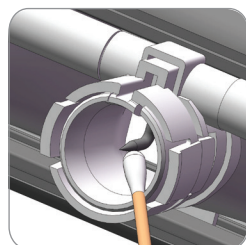
원격감시시스템(RMS)과의 연동
AMB-L과 RS485 Converter를 연결
하여 외부 RMS와 연동이 가능합니다.
It is connectable to RMS
(Remote Monitoring System)
through RS-485.



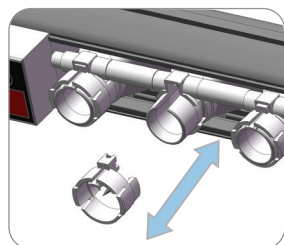
초소형 고압 트랜스 내장형 (고압케이블 불필요)
Slim and light weight piezo-ceramic transformer built into the ion bar
(No need for separate bulky transformer/control unit)



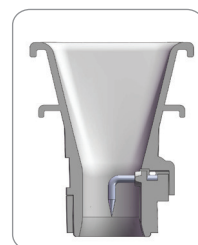
무선 리모트 컨트롤 기능
(개별제전기 선택, 이온밸런스, 주파수 변경, 설정상태 확인)
Wireless remote control (Select individual ion bar unit to communicate,
check ion balance, change frequency, and check current setting, etc)



간편한 관리 및 청소
Easy maintenance & cleaning



간편한 방전핀 교체
Convenient emitter pin for replacement

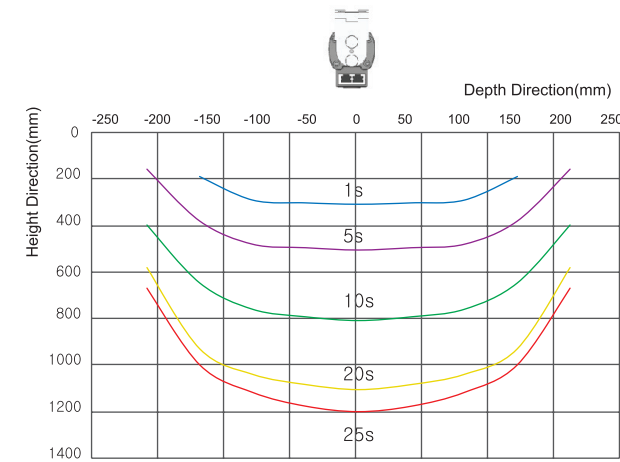


이물 생성을 최소화한 구조
Structured to minimize dusts or pollutants

ION BAR

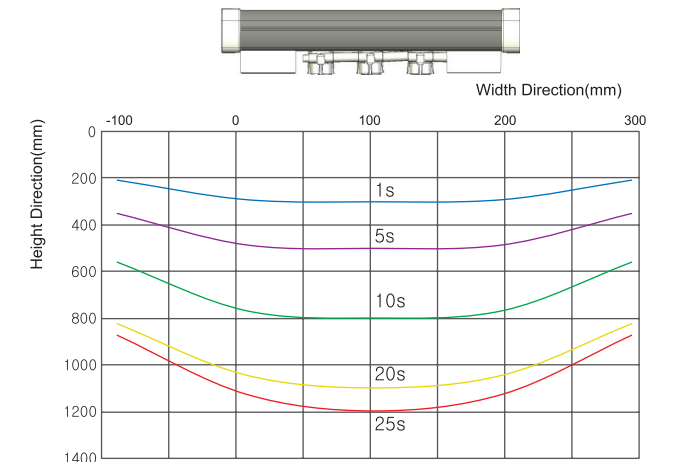
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



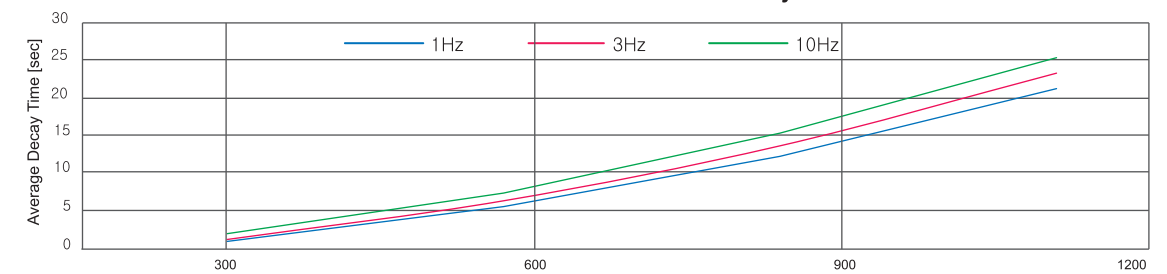
Down flow : 0.3MPa, Frequency : 5Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Down flow : 0.3MPa, Frequency : 5Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Distance and Decay Time



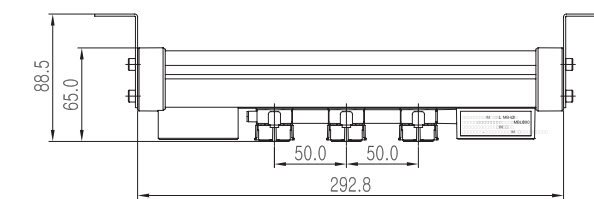
Down flow : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Installation Distance [mm]

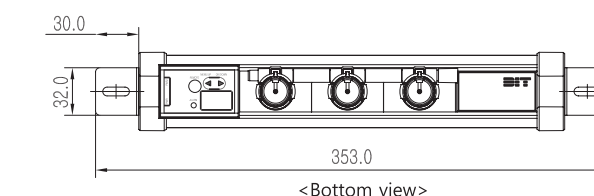
※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

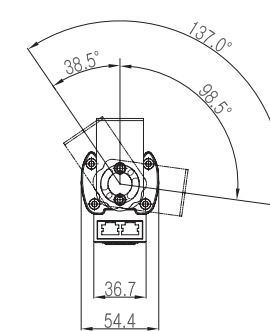
AMB-L050



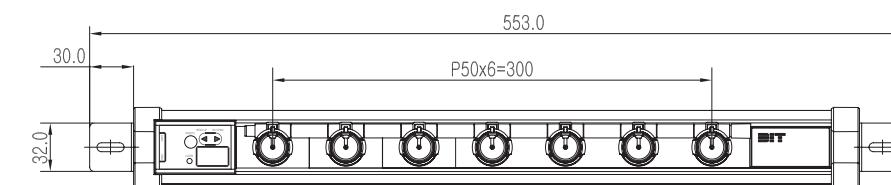
<Front View>



<Bottom view>



<Bracket rotation>



<Bottom view>

(Unit : mm)

Main Model	Length
AMB - L025	243mm
AMB - L030	293mm
AMB - L040	393mm
AMB - L050	493mm
AMB - L060	593mm
AMB - L070	693mm
AMB - L080	793mm
AMB - L090	893mm
AMB - L100	993mm
AMB - L110	1093mm
AMB - L120	1193mm
AMB - L130	1293mm
AMB - L140	1393mm
AMB - L150	1493mm

AMB-L Series의 길이는 최소 243mm에서 최대 1493mm 까지 50mm 간격으로 길이 대응이 가능한 제품입니다.

Bar Length : Sizes available from min 243mm up to 1493mm at 50mm intervals.

※브라켓 및 전원 케이블(RJ45 A형) 포함
Bracket / Power cable (RJ45 A type) included.

ION BAR

AMB-LS Series

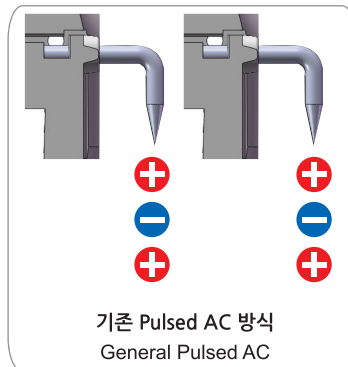
제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 570mA
소비 전력 (Power consumption)	Max. 14W
방전 전압 (Emitter voltage)	±6.5kV
출력 주파수 (Output frequency)	0.5Hz ~ 10Hz (Adjustable)
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	Pulsed AC
재질 (Material)	Body : ABS / Emitter pins : Titanium
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
제전 거리 (Coverage distance)	200mm ~ 600mm
오존발생량 (Ozone generation)	Under 0.005ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

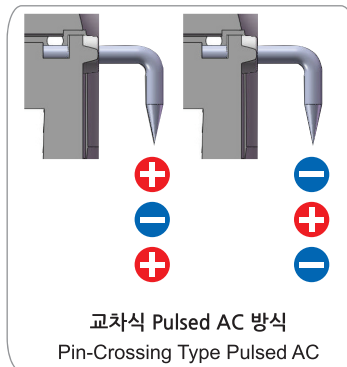
※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

핀 교차 Pulsed AC 방식으로 근접거리 Low-Offset 성능 구현[특허 출원]
Pin-Crossing Type Pulsed AC Has Low Offset-Voltage Performance at a Short Distance. [Patented]



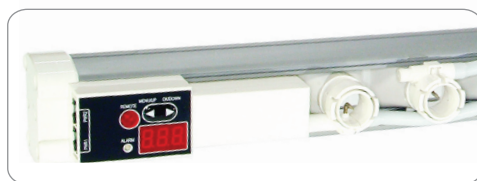
기존 Pulsed AC 방식
General Pulsed AC



교차식 Pulsed AC 방식
Pin-Crossing Type Pulsed AC

일반 Pulsed-AC의 근접거리에서의 Offset-Voltage 감소를 위하여, 핀 교차 형태의 Pulsed-AC 방식을 채택하여 근접거리에서 Offset-Voltage 성능을 향상시킨 근접거리용 Laminar-flow Ionizer

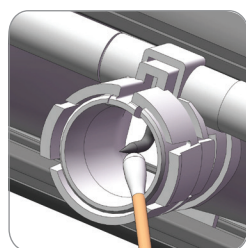
AMB-LS Series is optimized for short distance because it has low offset-voltage performance by pin-crossing type pulsed AC method.



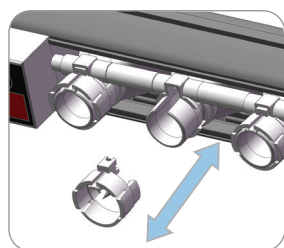
초소형 고압 트랜스 내장형 (고압케이블 불필요)
Slim and light weight piezo-ceramic transformer built into the ion bar (No need for separate bulky transformer/control unit)



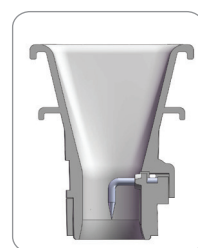
무선 리모트 컨트롤 기능(개별제전기 선택, 이온밸런스, 주파수 변경, 설정상태 확인)
Wireless remote control (Select individual Ion bar unit to communicate, check ion balance, change frequency, and check current setting, etc).



간편한 관리 및 청소
Easy maintenance & cleaning



간편한 방전핀 교체
Convenient emitter pin for replacement

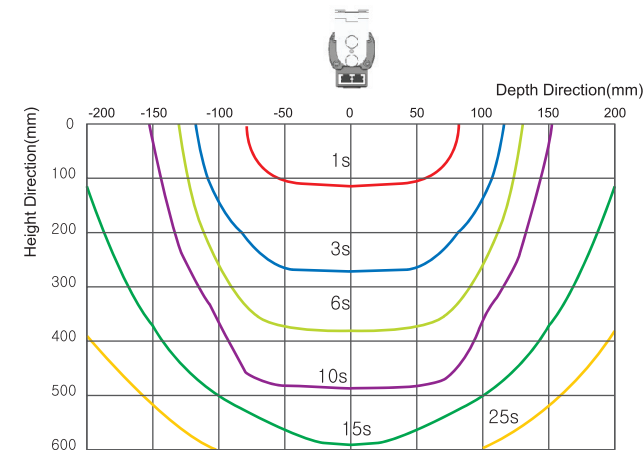


이물 생성을 최소화한 구조
Structured to minimize dusts or pollutants

ION BAR

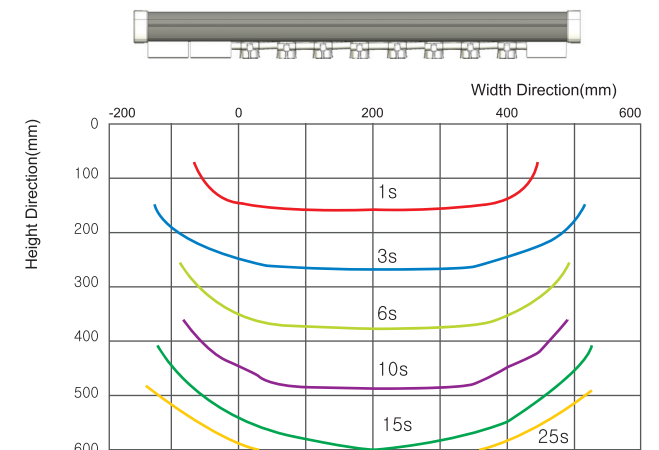
제품성능 / Product Performances

Relation between Depth Direction and Decay Time



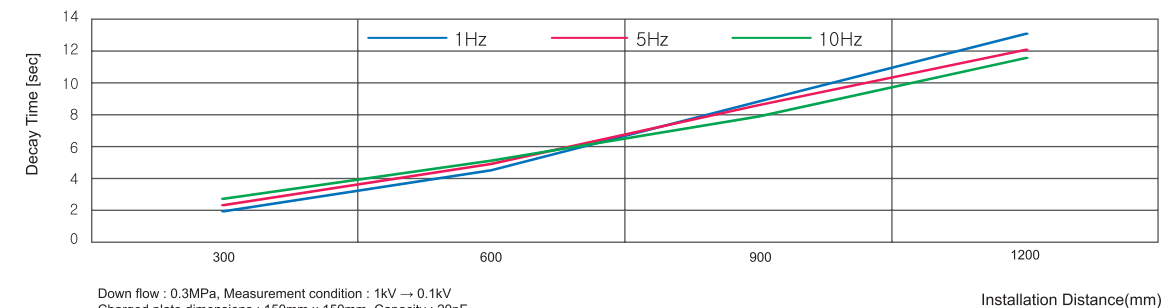
Down flow : 0.3MPa, Frequency : 5Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Down flow : 0.3MPa, Frequency : 5Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

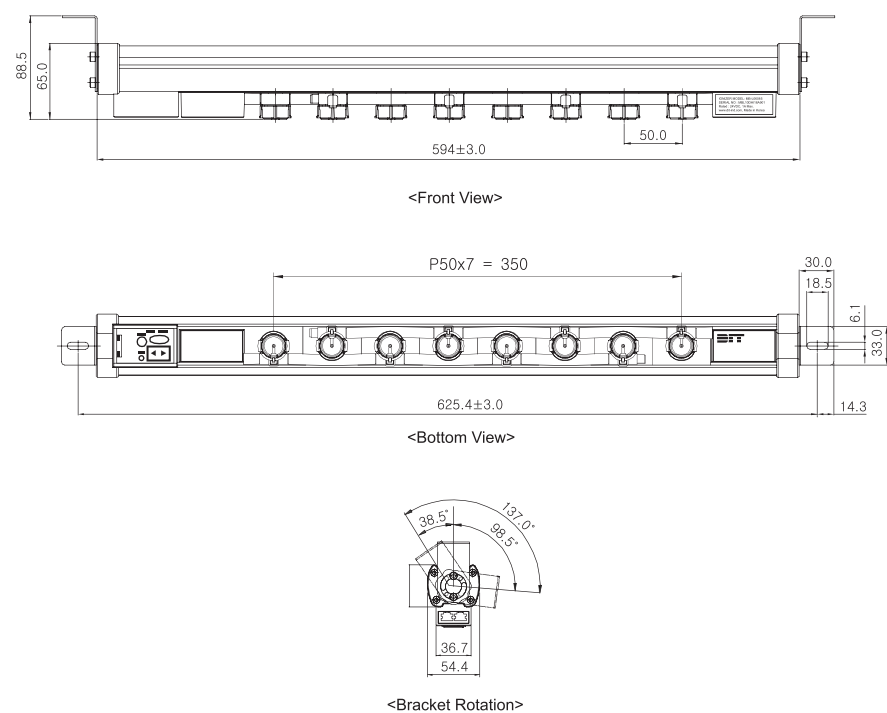
Relation between Distance and Decay Time



Down flow : 0.3MPa, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



(Unit : mm)

Main Model	Length
AMB - L0404S	394mm
AMB - L0506S	494mm
AMB - L0608S	594mm
AMB - L070AS	694mm
AMB - L080CS	794mm
AMB - L090ES	894mm
AMB - L100GS	994mm
AMB - L110IS	1094mm
AMB - L120KS	1194mm
AMB - L130MS	1294mm
AMB - L140OS	1394mm
AMB - L150QS	1494mm

AMB-LS Series의 길이는 최소 394mm에서 최대 1494mm 까지 100mm 간격으로 길이 대응이 가능한 제품입니다.

Bar Length : Sizes available from min 394mm up to 1494mm at 100mm intervals.

※브라켓 및 전원 케이블(RJ45 A형) 포함
Bracket / Power cable (RJ45 A type) included.

ION BLOWER

ASF-40A



제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	Max. 150mA
소비 전력 (Power consumption)	Max. 4W
방전 전압 (Emitter voltage)	±4.0kV
출력 주파수 (Output frequency)	50kHz
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	High-Frequency AC
재 질 (Material)	Body : ABS / Emitter pins : Titanium
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±10V
제전 거리 (Coverage distance)	100mm ~ 400mm
오존발생량 (Ozone generation)	Under 0.05ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~65%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



간편한 관리 및 청소
Easy maintenance & cleaning

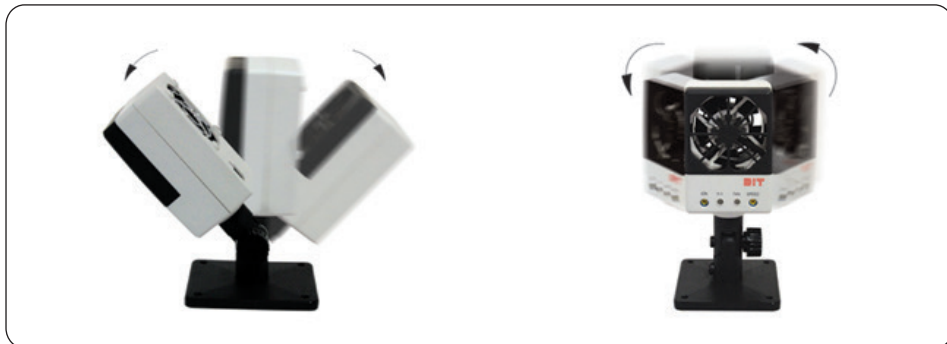


초소형 제전기
Subminiature ionizer



좁은 공간내 설치(자석부착)
Installable in cramped space

자유로운 회전각도



풍향 360° 회전 및 상하 조절 기능
360° vertical angle rotatable

ION BLOWER

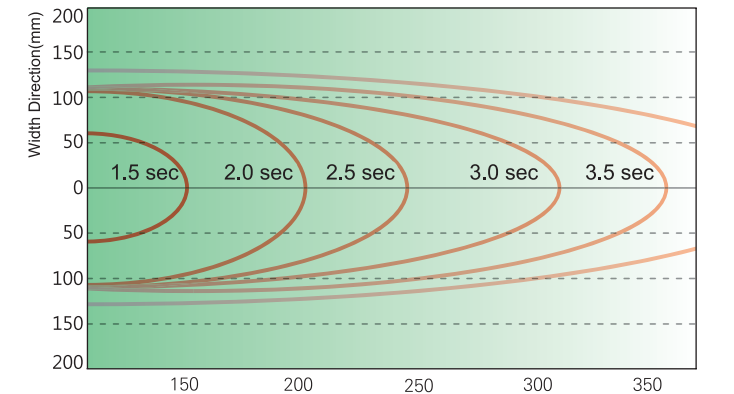
제품성능 / Product Performances

Relation between Distance and Decay Time

Distance (Cm)	Decay Time (sec)		
	1	2	3
10	1 sec		
15	1.5 sec		
20	2 sec		
30	3 sec		

Air volume : Max 0.27m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air volume : Max 0.27m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

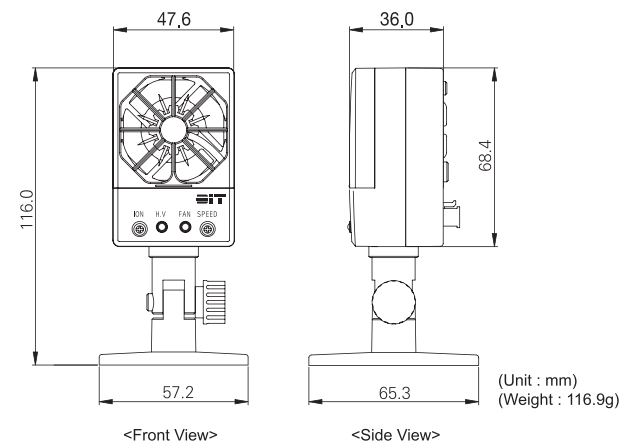
ASF-40A 제품은 전원케이블, 접지선, 브라켓 보저형으로 구성되어 있습니다.
ASF-40A package consists of a main unit, power cable, ground cable and optional bracket.

AC 어댑터가 부속되어 있지 않으며, AC 전원을 사용 할 경우 전용 어댑터를 구입하여 주십시오.
AC adapter is not included it may be bought separately if needed.

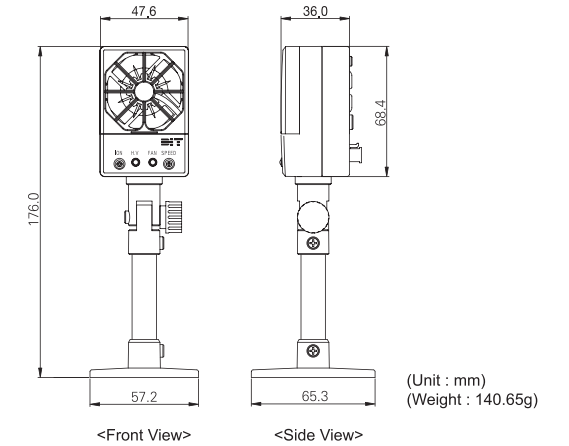
※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

A. 브라켓 / A (Standard length)



B. 브라켓 / B (Extended length)



상하 조절
Installation Angle

좌우 360° 조절
360° rotation

ION BLOWER

AMF-90 Series



제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	AC 100-240V 50/60Hz or DC 24V± 10%
입력 전류 (Input current)	1-fan 400mA
	2-fan 400mA
	3-fan 600mA
	4-fan 800mA
	5-fan 1200mA
소비 전력 (Power consumption)	MAX. 29W [5-fan]
방전 전압 (Emitter voltage)	±4.0kV
출력 주파수 (Output frequency)	50kHz
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	High-Frequency AC
재 질 (Material)	Body : ABS / Emitter pins : Titanium
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±15V
제전 거리 (Coverage distance)	100mm ~ 1200mm
풍 량 (Air Volume)	Max. 1.75m ³ / min [per 1-Fan]
오존발생량 (Ozone generation)	Under 0.05ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~65%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



자유로운 팬 모듈, 공간상자 조립 방식으로 다양한 길이와 구성 가능
Various assembly configurations of fan modules and spacing boxes are enabled



간편한 유지 보수 및 청소
Easy maintenance & cleaning

ION BLOWER

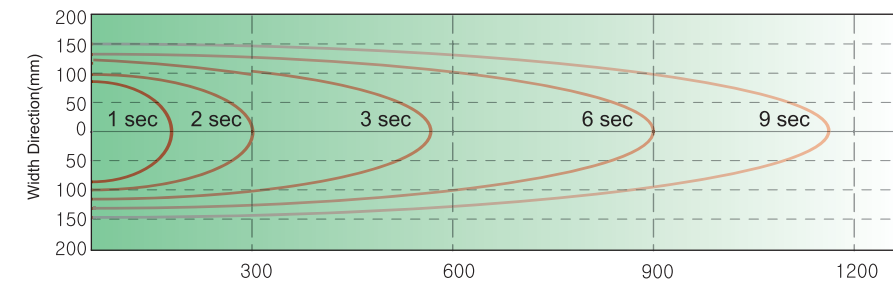
제품성능 / Product Performances

Relation between Distance and Decay Time

Distance (Cm)	Decay Time(sec)									
	1	2	3	4	5	6	7	8	9	10
30			2 sec							
60				3.5 sec						
90						6 sec				
120									9.5 sec	

Air volume : Max 1.75m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time



Air volume : Max 1.75m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

Single type

<Side View> <Front View>

Standard configurations

Multi-Fan type (Example: 3-fan) Customized configurations

A Minimum length

B Example 1

C Example 2

Category	Code	Length	Remarks
Control Board	A	51.50	1-FAN, 2-FAN
	B	103.00	2-FAN, 3-FAN, 4-FAN, 5-FAN
Space Box	C	51.50	
	D	103.00	
Fan Module	E	103.00	
Bracket Assy	F	13.00	
Side Cover	G	15.20	
Height	H	141.85	
Depth	I	53.75	
Bracket Length	J	167.45	
Bracket Width	K	65.00	
Bracket Depth		60.00	

Category	Code	Min. Length
Blower Lengh	1-FAN	210.1
	2-FAN	313.1
	3-FAN	466.6
	4-FAN	569.6
	5-FAN	672.6

ION BLOWER

AMF-A90 Series



제품사양 / Product Specification

Category	Specification
입력 전압 (Input voltage)	AC 100-240V 50/60Hz or DC 24V± 10%
입력 전류 (Input current)	1-fan 400mA
	2-fan 400mA
	3-fan 600mA
	4-fan 800mA
	5-fan 1200mA
소비 전력 (Power consumption)	Max. 29W [5-fan]
방전 전압 (Emitter voltage)	±6.5kV
출력 주파수 (Output frequency)	10Hz
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	Pulsed AC
재 질 (Material)	Body : ABS / Emitter pins : Titanium
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±30V
제전 거리 (Coverage distance)	200mm ~ 1200mm
풍 량 (Air Volume)	Max. 1.75m ³ / min [per 1-fan]
오존발생량 (Ozone generation)	Under 0.005ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~65%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



자유로운 팬 모듈, 공간상자 조립 방식으로 다양한 길이와 구성 가능
Various assembly configurations of fan modules and spacing boxes are enabled



간편한 유지 보수 및 청소
Easy maintenance & cleaning

ION BLOWER

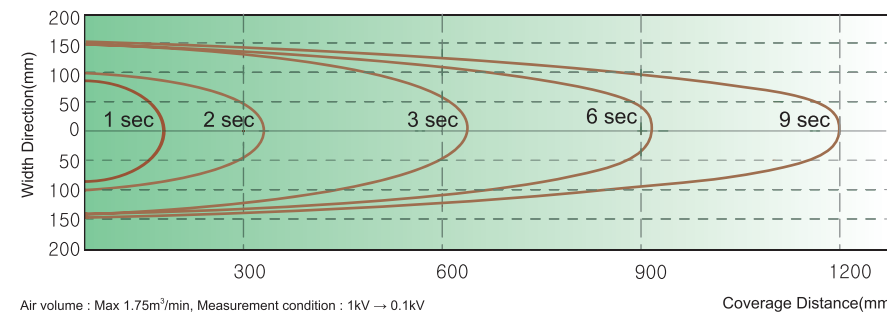
제품성능 / Product Performances

Relation between Distance and Decay Time

Distance (Cm)	Decay Time(sec)									
	1	2	3	4	5	6	7	8	9	10
30			1.8 sec							
60				2.8 sec						
90						5.8 sec				
120									9 sec	

Air volume : Max 1.75m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

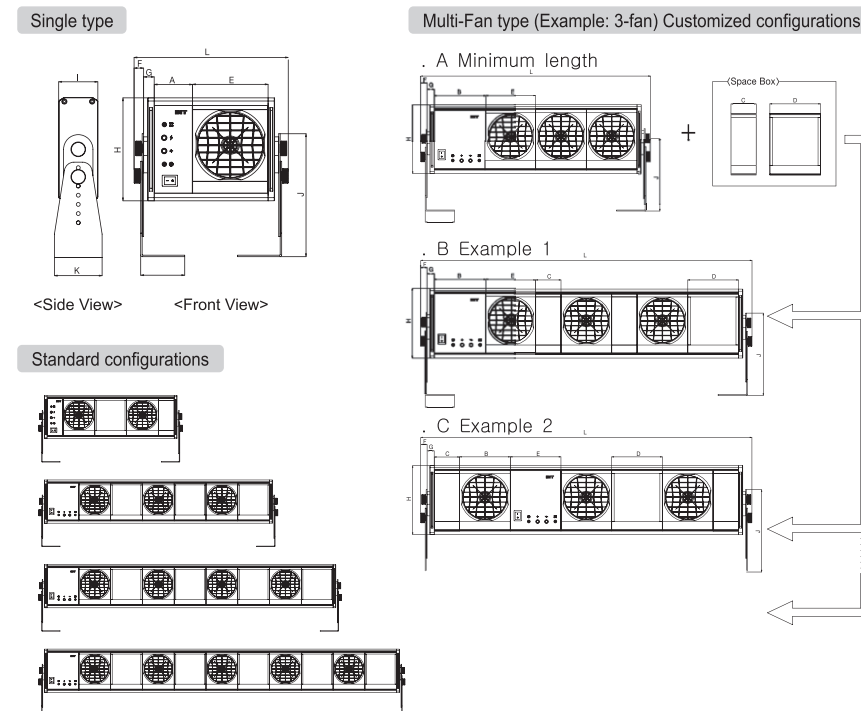
Relation between Width Direction and Decay Time



Air volume : Max 1.75m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



Category	Code	Length	Remarks
Control Board	A	51.50	1-FAN, 2-FAN
	B	103.00	2-FAN, 3-FAN, 4-FAN, 5-FAN
Space Box	C	51.50	
	D	103.00	
Fan Module	E	103.00	
Bracket Assy	F	13.00	
Side Cover	G	15.20	
Height	H	141.85	
Depth	I	53.75	
Bracket Length	J	167.45	
Bracket Width	K	65.00	
Bracket Depth		60.00	

Category	Code	Min. Length
Blower Lengh	1-FAN	210.1
	2-FAN	313.1
	3-FAN	466.6
	4-FAN	569.6
	5-FAN	672.6

ION BLOWER

AMF-95 Series



제품사양 / Product Specification

Category	Specification				
	1-fan	2-fan	3-fan	4-fan	5-fan
입력 전압 (Input voltage)	AC 100~240V~, 50/60Hz or DC 24V±10%				
소비 전력 AC (Power consumption)	Max. 24W		Max. 80W		
소비 전력 DC (Power consumption)	Max. 17W		Max. 55W		
출력 주파수 (Output frequency)	50kHz				
이온 발생 방식 (Ion generating method)	Corona discharge				
전압 인가 방식 (Voltage application method)	High Frequency AC				
재 질 (Material)	Body : ABS / Emitter pins : Titanium				
방전핀 교체 (Emitter replacement)	Replaceable				
방전핀 청소 (Emitter Cleaning)	Clean button				
이온 밸런스 (Ion balance)	Under average ±10V				
제전 거리 (Coverage distance)	100mm~1200mm				
디스플레이 (Display)	HV LED(G/R) , FAN LED(G/R)				
풍 량 (Air Volume)	Max. 1.75m³ /min[per 1-fan]				
오존발생량 (Ozone generation)	Under 0.05ppm				
사용온도 (Ambient temperature)	0~50℃				
사용습도 (Ambient humidity)	35~65%RH(No condensation)				

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



- 제품 컨트롤러 원터치 버튼을 이용한 자동 청소기능 실행 가능
Auto pin cleaning function by one-touch button on controller
- 설정을 통한 자동 주기 청소 기능 탑재
Auto pin cleaning function can be operated on a daily basis by setting menu.
- PLC를 이용한 청소기능 동작 가능
Auto pin cleaning function is available with PLC communication.
- 전원 사양(DC/AC)에 따른 모델 선택 가능
Able to choose products by the types of input voltage systems (DC 24V or AC 100~240V)



자유로운 팬 모듈, 공간상자 조립 방식으로 다양한 길이와 구성 가능
Various assembly configurations of fan modules and spacing boxes are enabled



간편한 유지 보수 및 청소
Easy maintenance & cleaning

ION BLOWER

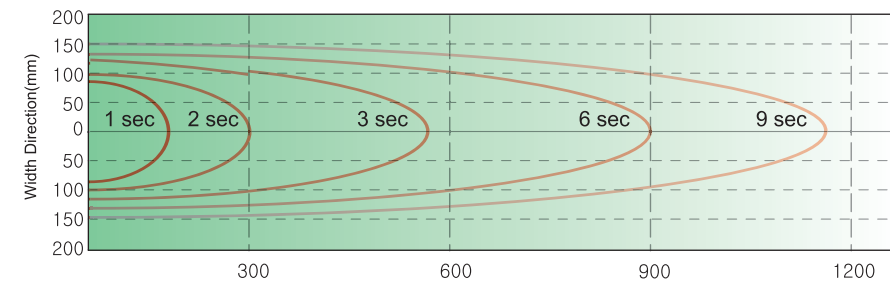
제품성능 / Product Performances

Relation between Distance and Decay Time

Distance (Cm)	Decay Time(sec)									
	1	2	3	4	5	6	7	8	9	10
30			2 sec							
60				3.5 sec						
90						6 sec				
120									9.5 sec	

Air volume : Max 1.75m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

Relation between Width Direction and Decay Time

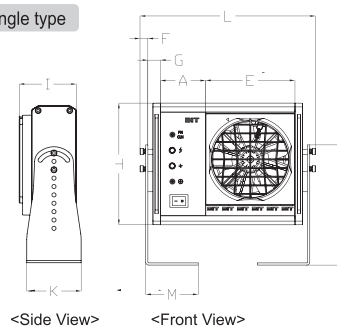


Air volume : Max 1.75m³/min, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

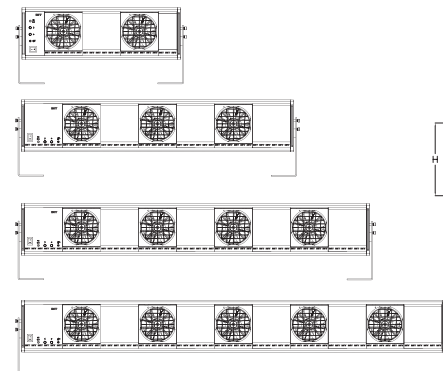
※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

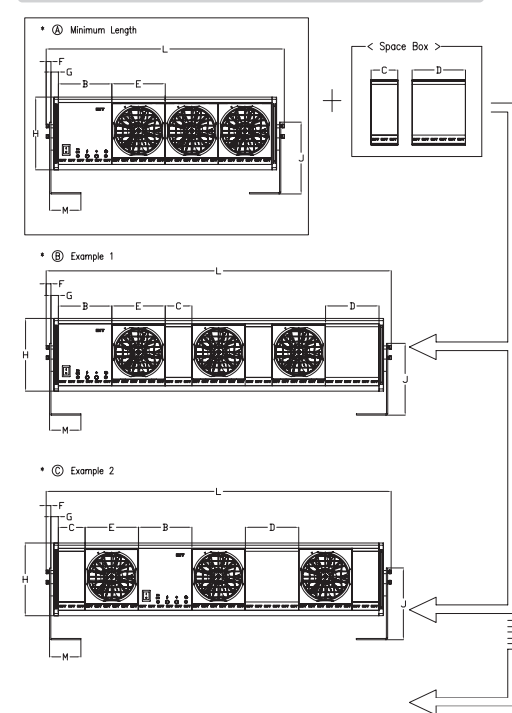
Single type



Standard configurations



Multi-Fan type (Example: 3-fan) Customized configurations



Category	Code	Length[mm]
Control box	A	51.5
Fan module	E	103
Bracket Assy	F	11
Side cover	G	15.2
Height	H	141.9
Depth	I	69.5
Bracket Length	J	137.4
Bracket Depth	K	65
Bracket Width	M	60

	Length[mm]
B	103
C	51.5
D	103
E	103
F	11
G	15.2
H	141.9
I	69.5
J	137.4
K	65
M	60

ION BLOWER

ASF-AD/PD Series



제품사양 / Product Specification

Category	Specification	
Model Type	AD Type	PD Type
이온 발생 방식 (Ion generating method)	Pulsed AC	High-Frequency
방전 전압 (Emitter voltage)	10~50Hz (Adjustable)	29kHz
입력 전압 (Input voltage)	AC100~240V(50/60Hz) or DC 24V±10%	
입력 전류 (Input current)	Max 0.8A	
방전핀 (Emitter pin)	Titanium	
이온 밸런스 (Ion balance)	< ± 10V typical	
제전시간 (Decay Time)	Better than 2.0 seconds at 600mm [Fan speed max(Level 5)]	
풍 량 (Air Volume)	Max 4.6m ³ /min per Fan	
오존 발생량 (Ozone generation)	Under 0.005ppm	Under 0.05ppm
표시기능 (Display)	7segment-Display, High Voltage Alarm LED(G/R), Fan Alarm LED(G/R) ※ Green : Normal, Red : Abnormal	
수동조절기능 (Functions)	Fan Speed, Operating frequency, Ion-balance, Auto-cleaning, PLC Alarm Select, Address, Ionizer On/Off, Password	
청소기능 (Pin cleaning)	Option (Auto or manual)	
무 게 (Weight)	Max 1.8kg	
사용 온도 (Ambient temperature)	0℃~50℃	
사용습도 (Ambient humidity)	35~65%RH (No condensation)	

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

유지보수의 편의성 극대화 Maximized Convenience of Maintenance



- 청소 브러시 장착으로 핀 청소 용이
(자동핀 청소/수동핀 청소 모델 선택 가능)
Easy to clean emitter pins with a pin brush
(Option: Auto pin cleaning type or Manual pin cleaning type)
- 뒷면 커버 분리형으로 팬 청소 용이
Easy to clean a fan with a removable rear fan cover
- Auto-Balance 회로 내장으로 핀의 오염 및 마모에도 제전 성능의 장기간 유지 가능
Stable performance for long period in spite of pollution, wear and tear on emitter pins by using auto-balance circuit

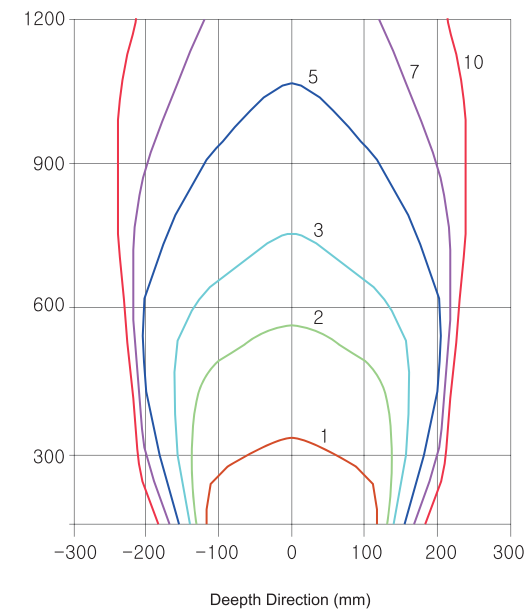
다양한 옵션으로 사용자 환경에 최적화 Optimized for User Environments with Various Options



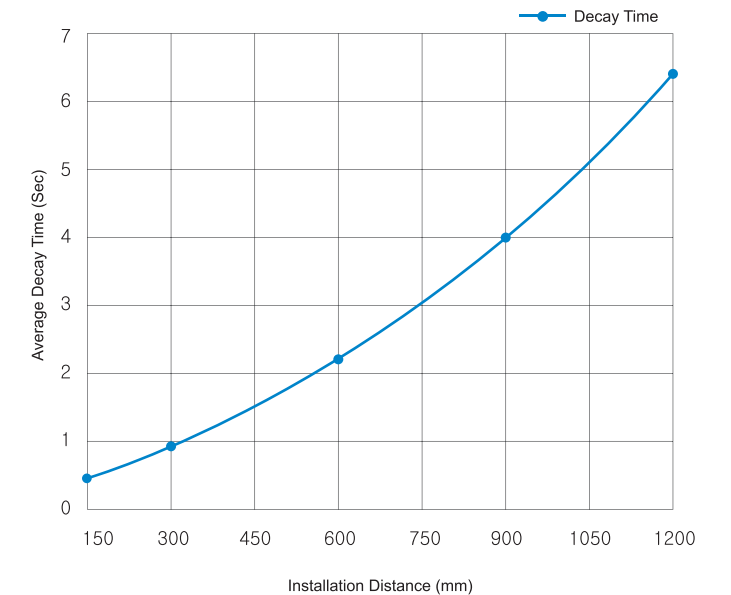
- 제전 방식(고주파 AC/Pulsed AC)에 따른 모델 선택 가능
Able to choose products by the types of ion generating methods (H/F AC or Pulsed AC)
- 전원 사양(DC/AC)에 따른 모델 선택 가능
Able to choose products by the types of input voltage systems (DC 24V or AC 100~240V)
- 메뉴에서 알람 시그널 출력 방식(NPN/PNP) 설정 가능
Able to choose output signal methods (NPN or PNP)
- 5단계 풍량 선택 가능(120mm fan 적용으로 최대 Max 4.6m³)
Air volume can be adjusted up to 4.6m³/min(per 1 fan) by using 120mm Fan [5 levels]
- PLC/RS485 통신을 통한 원격 조정 가능
Remote control is available with PLC / RS485 communication

ION BLOWER

제품성능 / Product Performances

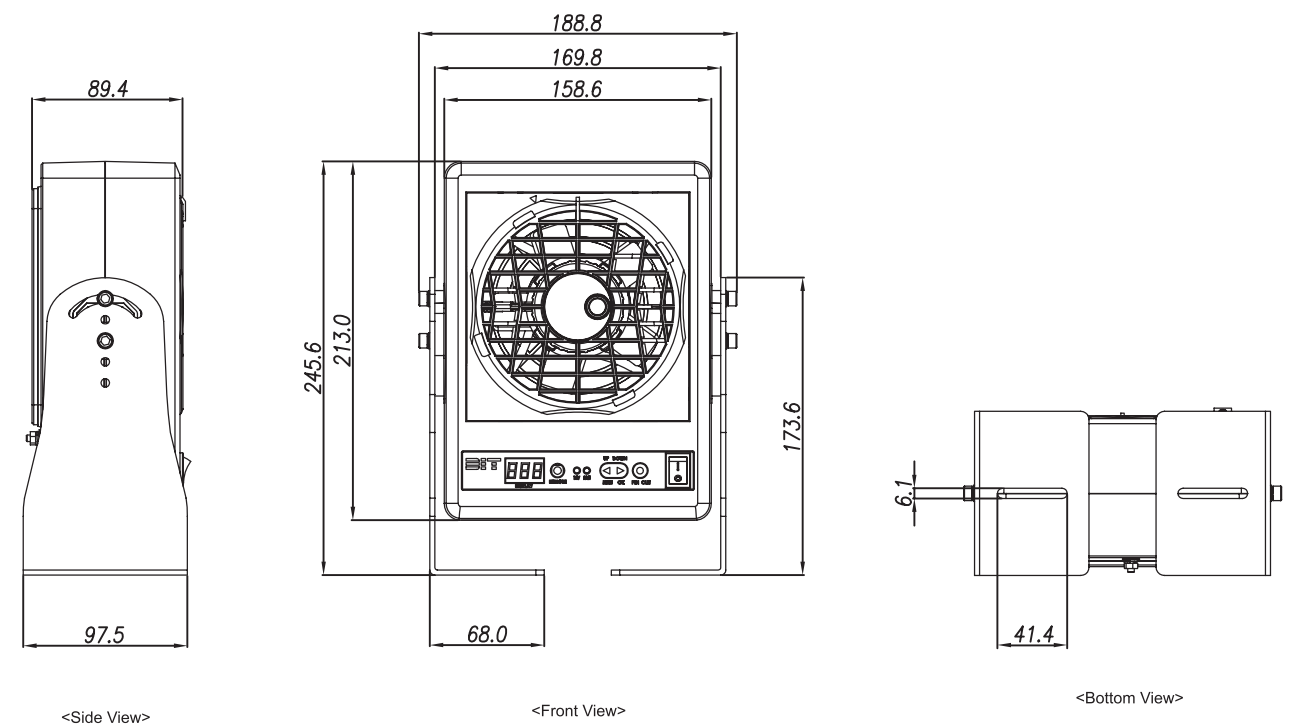


Air volume : Max 4.6m³/min, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF



※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



ION BLOWER

AMF-AE Series



제품사양 / Product Specification

Category	Specification			
입력 전압 (Input voltage)	AC 100-240V 50/60Hz or DC 24V± 10%			
입력 전류 (Input current)		1-fan	2-fan	3-fan
	DC 24V	1.5A	x	x
	AC 110V	610mA	1220mA	1830mA
	AC 220V	250mA	500mA	750mA
소비 전력 (Power consumption)	Max. 123W [3-fan]			
방전 전압 (Emitter voltage)	±5.5kV(±5%)			
출력 주파수 (Output frequency)	10 ~ 50Hz (Adjustable)			
이온 발생 방식 (Ion generating method)	Corona discharge			
전압 인가 방식 (Voltage application method)	Pulsed AC			
재질 (Material)	Body : ABS / Emitter pins : Titanium			
방전핀 교체 (Emitter replacement)	Replaceable			
이온 밸런스 (Ion balance)	Under average ±30V			
제전 거리 (Coverage distance)	200mm ~ 1500mm			
풍량 (Air Volume)	Max. 6.425m ³ / min (Level 5)			
기능 (Functions)	Ion on/off, RS485 connect, Password PLC 신호조정, 방전핀 자동 청소, 동작주파수, Fan-Speed, Ion-Balance			
오존발생량 (Ozone generation)	Under 0.005ppm			
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122℉)			
사용습도 (Ambient humidity)	35~65%RH (No condensation)			

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

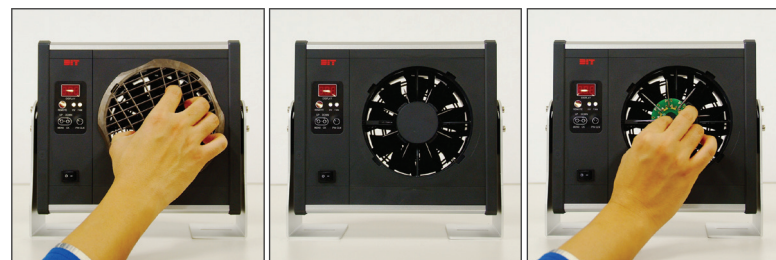
제품장점 / Advantages

방전핀 자동 청소 기능 내장으로 유지보수에 대한 편리성 증대 Easy Maintenance with Auto Cleaning Function for Emitter Pin



- 제품 컨트롤러 원터치 버튼을 이용한 자동 청소기능 실행 가능
Auto tip cleaning function by one-touch button on controller
- 본체 메뉴 설정을 통한 일(DAY) 단위 자동 주기 청소 기능 탑재
Auto tip cleaning function can be operated on a daily basis by setting menu.
- PLC / RS485를 이용한 원격 청소기능 동작 가능
Remote control of auto pin cleaning function is available with PLC / RS485 communication.

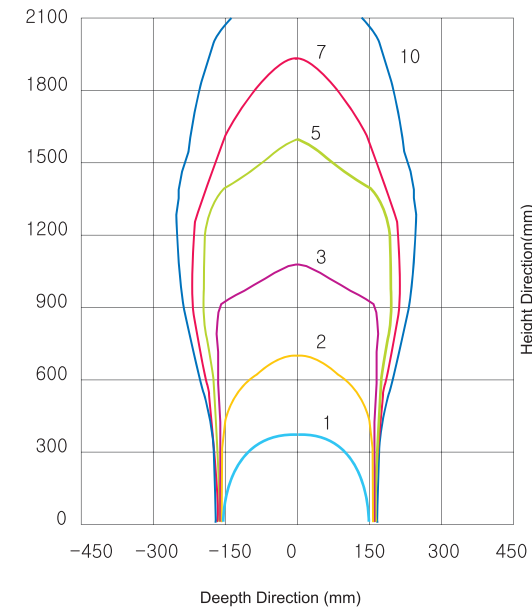
탈착형 방전침 Ass'y 구조로 방전핀 교체 편리성 증대 Easy Replacement with Removable Emitter Pin



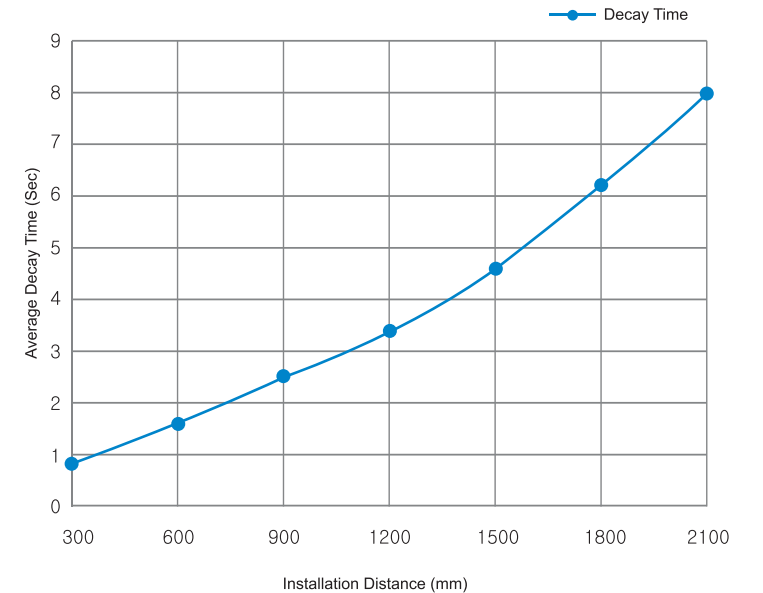
- 140mm Fan 사용으로 최대 풍량[1Fan 기준]
6.425m³/min까지 사용 가능[5단계 조절 기능]
Air volume can be adjusted up to 6.425 m³/min(per 1-fan) by using 140mm Fan [5 levels].
- Auto-balance 회로 내장으로 핀의 오염 및 마모에도 제전 성능의 장기간 유지 가능
Stable performance for long period in spite of pollution, wear and tear on emitter pin by using auto-balance circuit.
- PLC / RS485 통신을 통한 원격 조정 기능
Remote control is available with PLC/RS485 communication.
- 간편한 유지 보수 및 청소
Easy maintenance & cleaning

ION BLOWER

제품성능 / Product Performances

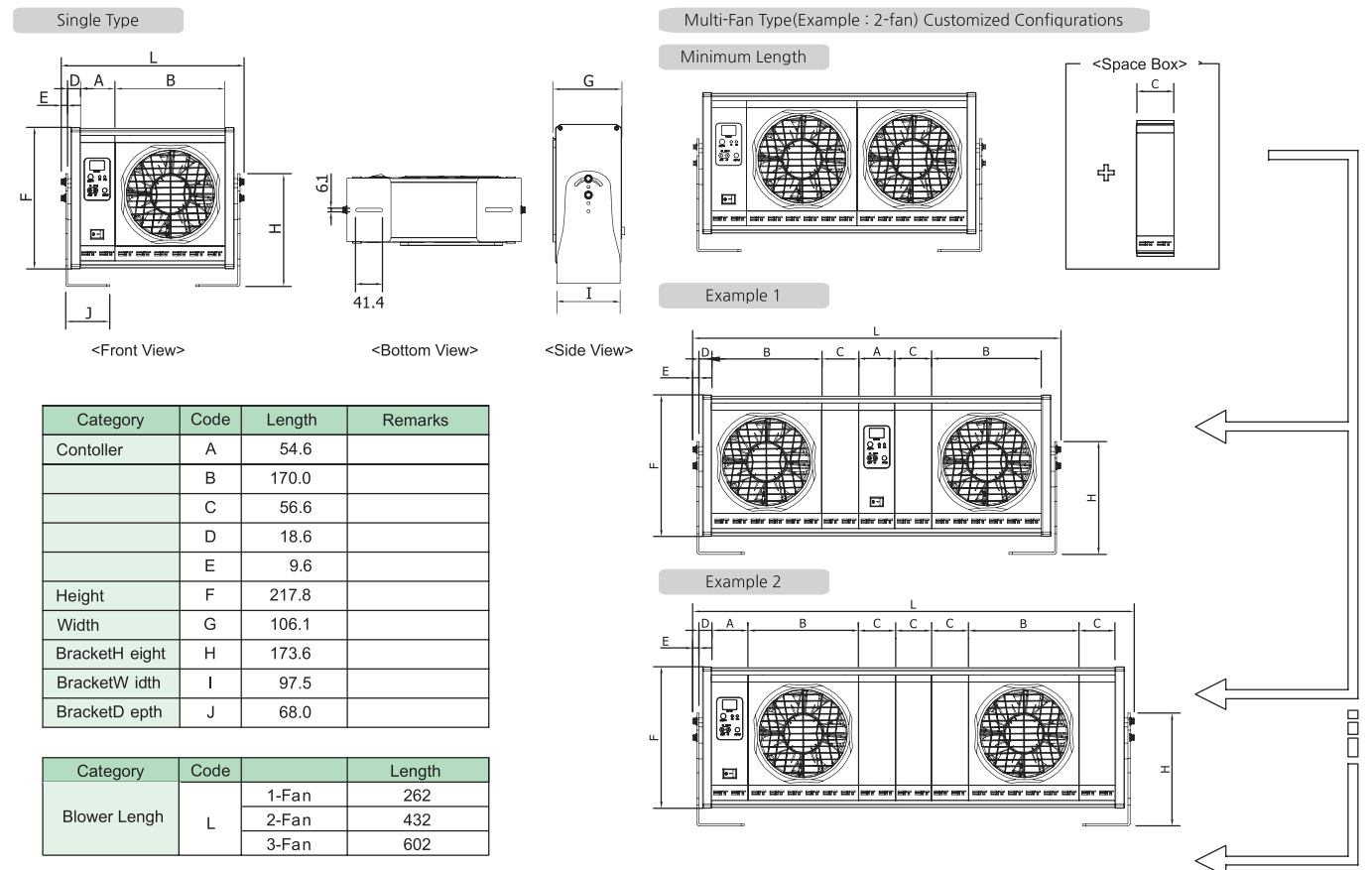


Air volume : Max 6.425m³/min, Frequency : 30Hz, Measurement condition : 1kV → 0.1kV
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF



※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



ION NOZZLE

AZM-G11 / AZM-G12



AZM-G11(Standard)



AZM-G12(Optional)

제품사양 / Product Specification

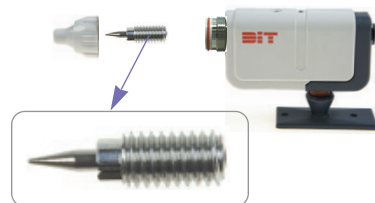
Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	200mA
소비 전력 (Power consumption)	Max. 5W
방전 전압 (Emitter voltage)	±4.0kV
출력 주파수 (Output frequency)	50kHz
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	High-Frequency AC
재질 (Material)	Body : ABS / Emitter pins : Tungsten
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±15V
공급 에어 (Air)	종류 (Type) CDA(Clean dry air), N2
압력 (Pressure)	0 ~ 0.5 MPa
분출력 (Blow-off-force)	128L/cm ² [0.3MPa]
공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.05ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



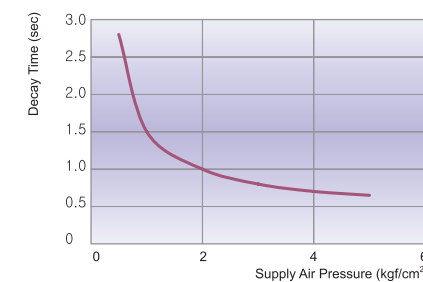
알람 출력 기능
High voltage alarm output



간단한 청소 및 유지관리
Easy cleaning and maintenance

제품성능 / Product Performances

Relation between Supply Air Pressure and Decay Time

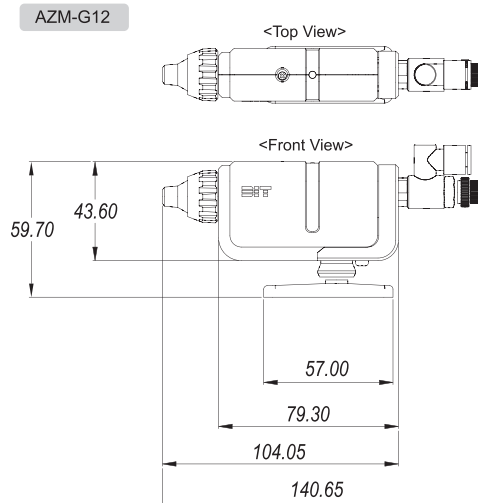
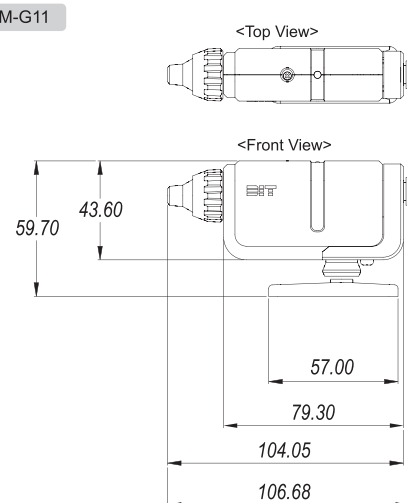


Air purge : 0.3MPa, Distance : 150mm, Measurement condition : 1kV → 0.1kV,
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다.
(This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

(Unit : mm)



ION GUN

AZM-G1G



제품사양 / Product Specification

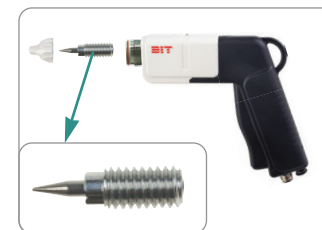
Category	Specification
입력 전압 (Input voltage)	DC 24V± 10%
입력 전류 (Input current)	200mA
소비 전력 (Power consumption)	Max. 5W
방전 전압 (Emitter voltage)	±4.0kV
출력 주파수 (Output frequency)	50kHz
이온 발생 방식 (Ion generating method)	Corona discharge
전압 인가 방식 (Voltage application method)	High-Frequency AC
재질 (Material)	Body : ABS / Emitter pins : Tungsten
방전핀 교체 (Emitter replacement)	Replaceable
이온 밸런스 (Ion balance)	Under average ±15V
공급 에어 (Air)	종류 (Type) CDA(Clean dry air), N2
압력 (Pressure)	0 ~ 0.5 MPa
분출력 (Blow-off-force)	128L/cm ² [0.3MPa]
공급튜브 직경 (Air tube diameter)	Ø6 (Outside)
오존발생량 (Ozone generation)	Under 0.05ppm
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)
사용습도 (Ambient humidity)	35~85%RH (No condensation)

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Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



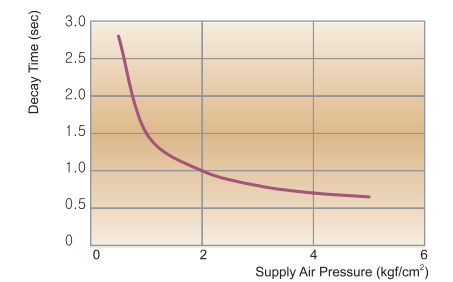
알람 출력 기능
High voltage alarm output



간단한 청소 및 유지관리
Easy cleaning and maintenance

제품성능 / Product Performances

Relation between Supply Air Pressure and Decay Time

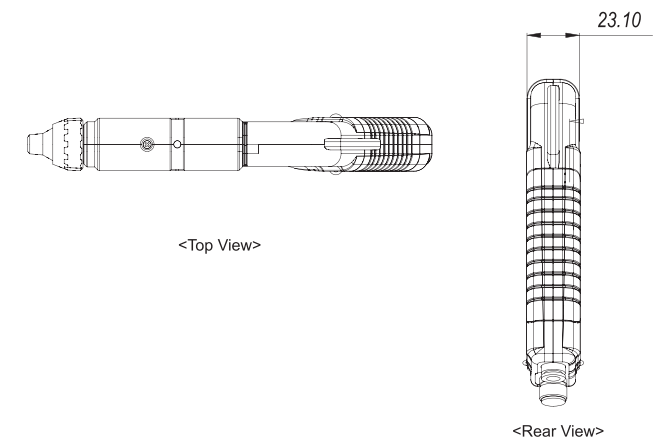
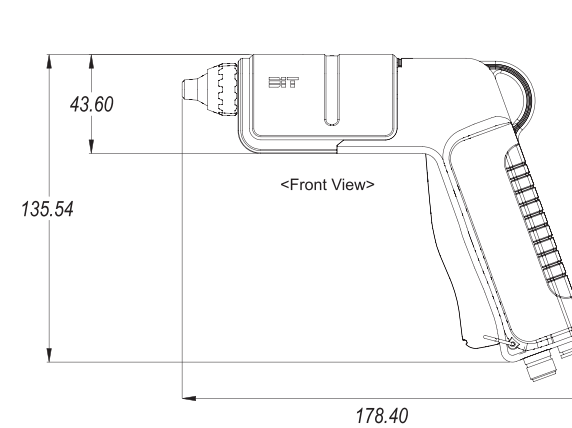


Air purge : 0.3MPa, Distance : 150mm, Measurement condition : 1kV → 0.1kV,
Charged plate dimensions : 150mm x 150mm, Capacity : 20pF

※ 상기 성능그래프는 당사 실험실 기준입니다.
(This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions

(Unit : mm)



CHARGED-PLATE MONITOR

ARC-P102ZA



제품사양 / Product Specification

Category	Specification
컨트롤러 (Controller)	규격(Dimension) 63mm(H) x 125mm(W) x 154mm(D)
	무게(Weight) <1.2Kg
플레이트 (Plate)	규격(Dimension) 150mm x 150mm x 43mm(H)
	정전용량(Capacitance) 20pF ± 2pF
	무게(Weight) <0.8Kg
센서 (Sensor)	Oscillating chopper type (DIT)
입력 전압 (Input voltage)	12Vdc ± 10%
입력 전류 (Input current)	1A
충전지 사양 (Battery specification)	NiMH 7.2V 6 pack
충전 시간 (Battery charging time)	3hrs(Until full charge)
사용 시간 (Battery use time)	8hrs(Full charge statement)
이온밸런스 측정 (Float mode)	거리 (Range) 0 to ±1100V DC or peak AC
	안정성 (Stability) < 10% of initial voltage with 5 minutes [40% RH at 25℃]
제전속도 측정 (Decay-time mode)	Start/Stop accuracy 2L/min(±10%) [Under 0.1MPa]
	Time resolution 0.1sec(0.1~999.9sec)
재질 (Materiel)	거리 (Range) Start voltage : ±1 ~ ±1000V / Available 1V inetrvers. Stop voltage : 0 ~ ±999V / Available 1V inetrvers.
	컨트롤러 (Controller) SUS 1.2T
	플레이트 (Plate) SUS 1.2T
기능 (Function)	(+)Decay-time, (-)Decay-time, Reset
디스플레이 (Display)	FND 2 set(Plate-voltage, Decay-time)
통신 사양	USB communication
사용 온도 (Ambient temperature)	5℃ ~ 35℃
사용 습도 (Ambient humidity)	RH 80% under (No condensation)
보관 온도 (Storage temperature)	0℃ ~ 50℃
보관 습도 (Storage humidity)	RH 80% under (No condensation)

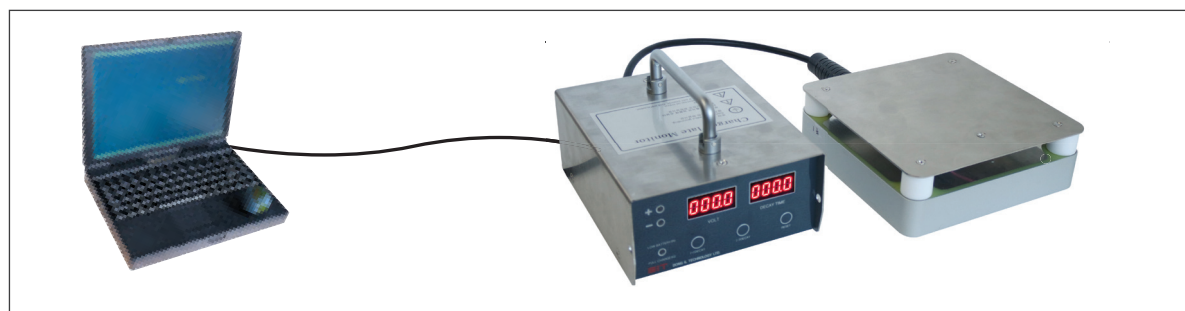
※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

Plate 손잡이 구조와 본체(Controller)의 소형/경량화로 휴대성 증대
Improving Portability, Minimizing Structure of Plate Handle and Controller



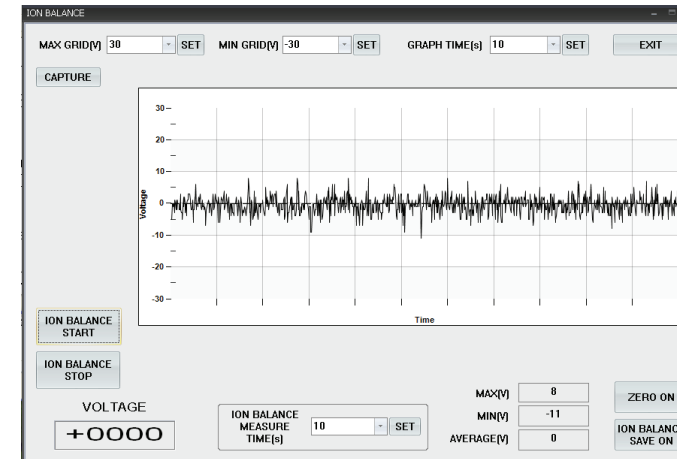
무상 제공 프로그램을 이용한 PC에서의 측정값 확인 및 저장 가능
Real Time Monitoring and Data Logging in Computer by Free Software



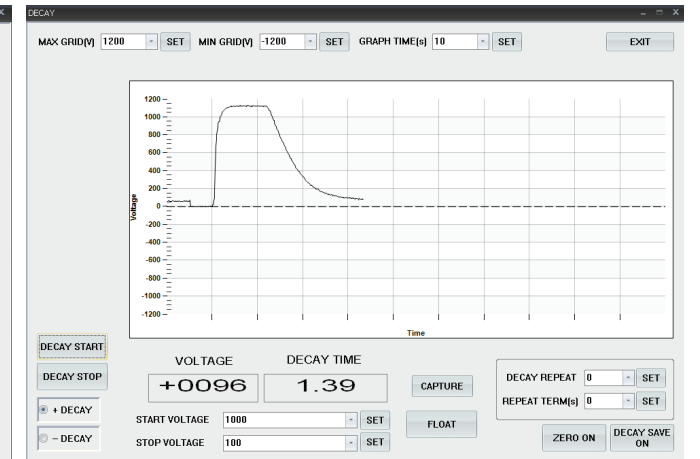
CHARGED-PLATE MONITOR

측정 그래프 / Measurement Graph

Ion Balance



Decay Time

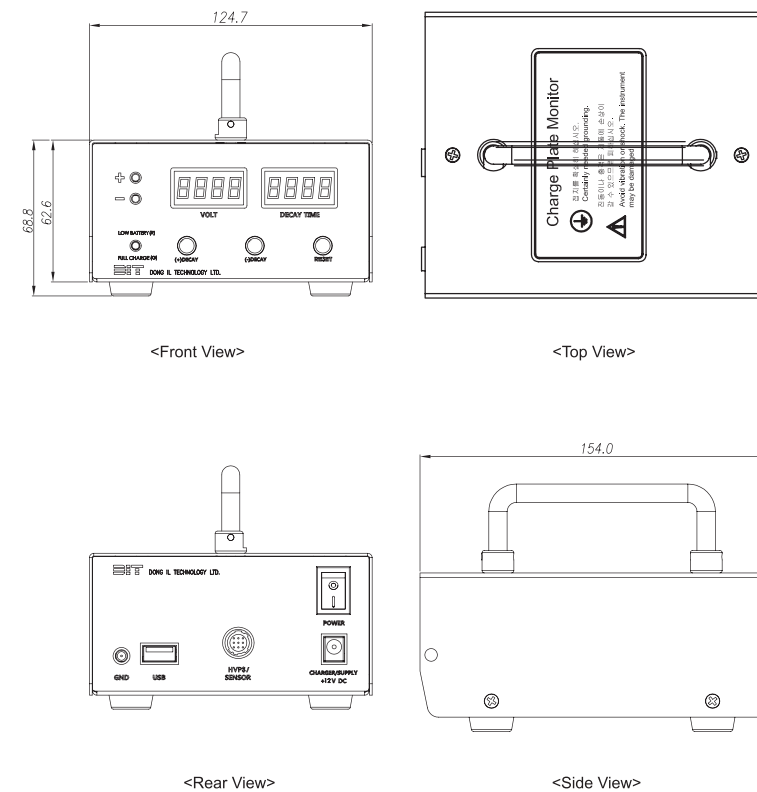


※ Ion balance 또는 Decay time 측정 전 정확한 데이터를 얻기 위하여 Conductive plate부를 Ground시킨 후 전면의 Reset 버튼을 1초 이상 길게 눌러 "Zero" 셋팅을 실시한 후 사용하세요.
※ In order to obtain accurate data, please use zero setting to press the reset button after earth conductive plate

※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

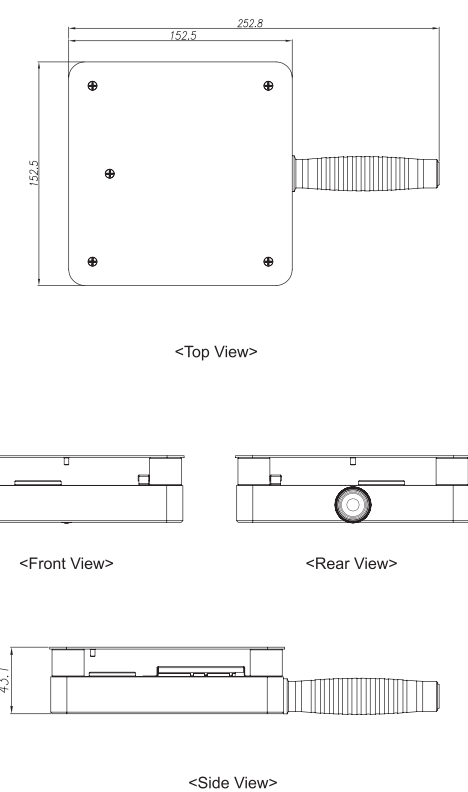
제품외관도 / Dimensions

Controller



Charging Plate

(Unit : mm)



ION - BALANCE CHECKER

ARS-M002ZA

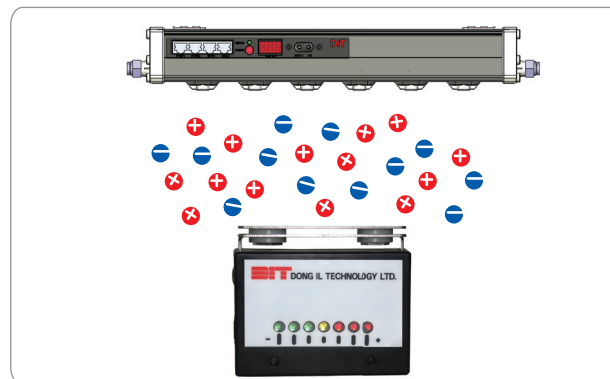


제품사양 / Product Specification

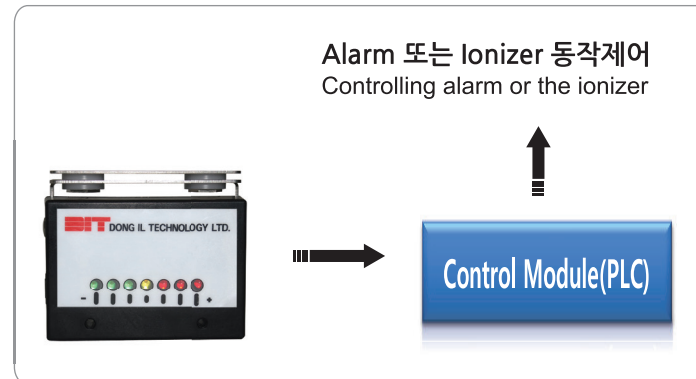
Category	Specification
제품 규격 (Dimension)	65mm(W) x 55.4mm(H) x 24.3mm(D)
입력 전압 (Input voltage)	12~24V
센서 (Sensor)	Oscillating chopper type(DIT)
측정 범위 (Sensing range)	LED 1 on :±10V upper ±50V under LED 1,2 on :±50V upper ±100V under LED 1,2,3 on :±100V upper
응답 속도 (Response time)	1sec
기능 (Function)	Ion balance check
디스플레이 (Display)	Color LED
재질 (Material)	ABS (Conductive)
통신 (Communication)	Analog output (1~5V)
사용온도 (Ambient temperature)	10℃ ~ 40℃ (50~104°F)
사용습도 (Ambient humidity)	0~60%RH (No condensation)

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



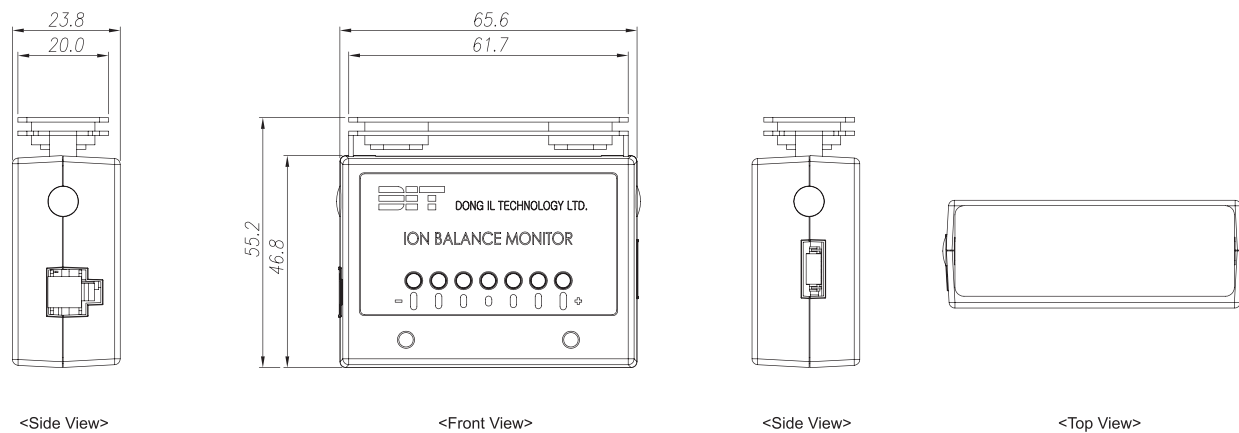
Ionizer 하단, 제품이 지나는 거리에서 Ion-balance 편향 여부/정도 측정
Monitoring ion-balance, installing close to the object



측정 데이터와 비례하는 아날로그 신호가 출력되므로, PLC등의 외부 제어모듈과 연동하여 관리 가능
Connectable to external control module(PLC) by analog signal proportional to a measured data

제품외관도 / Dimensions

(Unit : mm)



HAND-HELD ELECTROSTATIC FIELDMETER

ARS-H002ZA

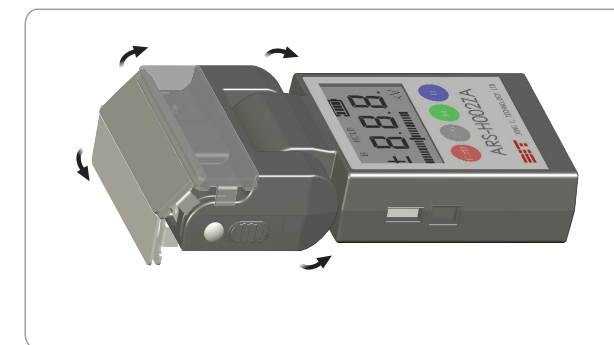


제품사양 / Product Specification

Category	Specification	
입력 전압 (Input voltage)	9V±10% (Alkaline battery use)	
센서 (Sensor)	Oscillating chopper type (DIT)	
측정 거리 (Distance)	25mm (±0.5mm)	
측정 범위 (Range / Autochange)	정밀모드 (Precise mode)	±2kV (±10%)
	확장모드 (Expanded mode)	±20kV (±10%)
	이온밸런스 측정모드 (Ion balance mode)	±300V (±10%)
해상도 (Resolution)	전위 측정모드 (Electrostatic voltage mode)	10V (-1.99kV~+1.99kV)
	이온밸런스 측정모드 (Ion balance mode)	100V (<-20.0kV, >+20.0kV)
응답 속도 (Response time)	1sec	
디스플레이 (Display)	HTN-LCD	
통신 (Communication)	USB communication	
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122°F)	
사용습도 (Ambient humidity)	35~85%RH (No condensation)	

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages



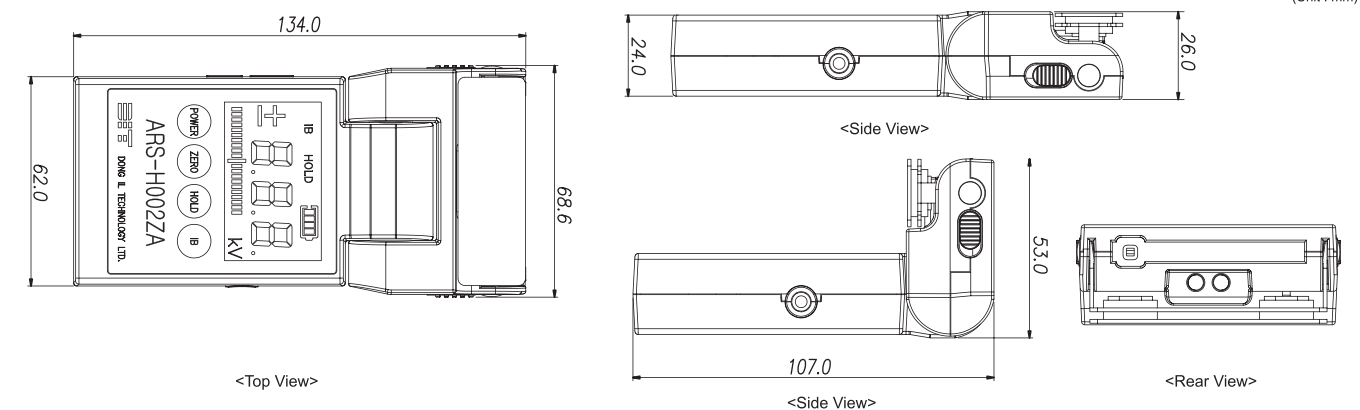
헤더부 회전기능 / 이온 플레이트 회전구조로 측정 편리성 강화
Rotatable header makes measuring electrostatic more convenient in any place.



PC와 연결하여 실시간 모니터링 / 저장 가능. (USB포트를 이용하여 측정값 전달)
Real time monitoring and data logging in computer through a USB port

제품외관도 / Dimensions

(Unit : mm)



ELECTROSTATIC FIELDMETER with Wireless Communications

ARS-M002Z2



제품사양 / Product Specification

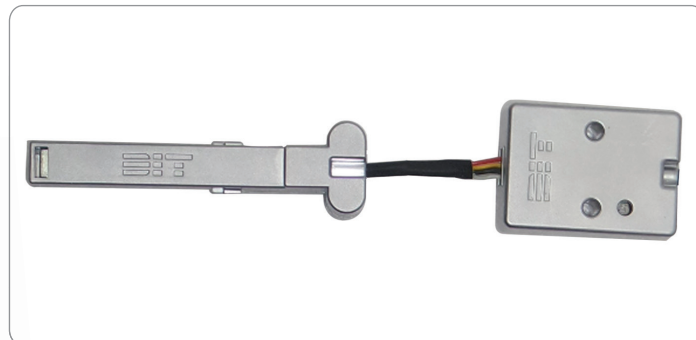
Category	Specification	
제품 규격 (Dimension)	(W)62 x (H)125 x (D)25.3(mm)	
입력 전압 (Input voltage)	+9VDC ±10%(Alkaline battery use)	
센 서 (Sensor)	Oscillating chopper type(DIT)	
측정 거리 (Sensing distance)	25mm or 50~700mm	
측정 범위 (Sensing range)	정밀모드 (Precise mode)	±2kV (±10%)
	확장모드 (Expanded mode)	50~300mm:±20kV (±10%) 301~700mm:±20kV (±20%)
	-9.99kV ~+9.99kV	10V
	<-10kV, +10kV<	100V
응답 속도 (Response time)	1sec	
기능 (Function)	Power on/off, Zero adjustment, Distance adjustment	
디스플레이 (Display)	Color LED	
재질 (Material)	ABS (Conductive)	
통신 (Communication)	Wireless communication	
사용온도 (Ambient temperature)	10℃ ~ 40℃ (50~104 F)	
사용습도 (Ambient humidity)	0~60%RH (No condensation)	

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

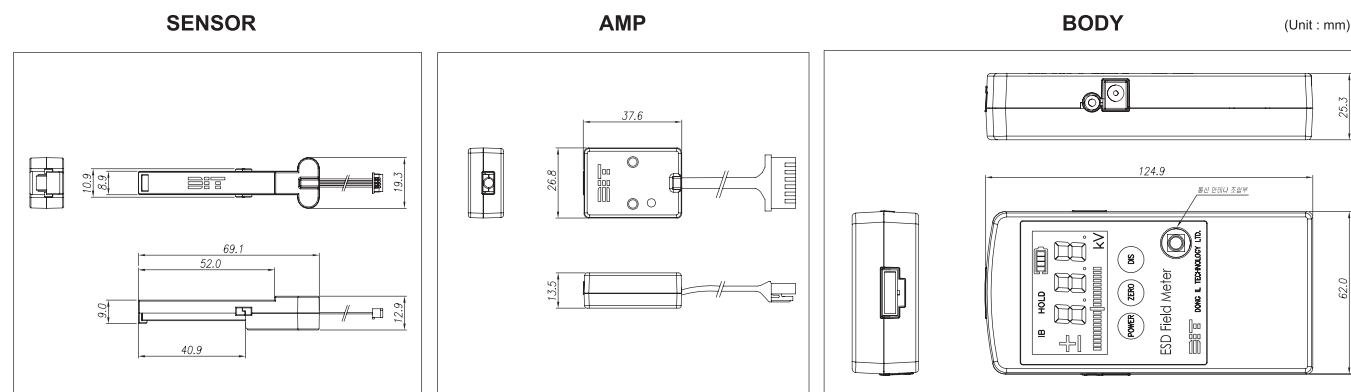


무선통신을 이용하여 측정된 정전기 데이터의 PC모니터링 가능
(동시 최대 4대 / 무상 프로그램 제공)
Real time monitoring and data logging in computer by free software through wireless communication(Max 4 units)



센서와 Amp를 분리함으로써 좁은 공간에도 측정이 용이하도록 소형화 되었습니다.
Dividing sensor and amp makes measuring electrostatic more convenient in confined space.

제품외관도 / Dimensions



ELECTROSTATIC FIELDMETER

ARS-S005

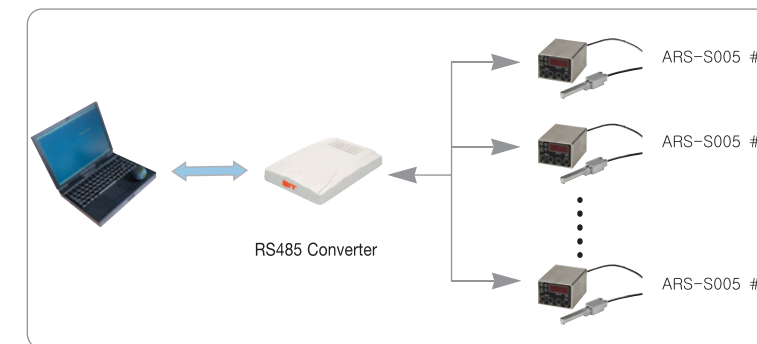


제품사양 / Product Specification

Category	Specification	
입력 전압 (Input voltage)	DC 24V $\pm 10\%$	
입력 전류 (Input current)	130mA	
소비 전력 (Power consumption)	Max 3W	
센서 (Sensor)	Oscillating chopper type (DIT)	
측정 거리 (Distance)	정밀모드 (Precise mode)	25mm (± 0.5)
	확장모드 (Expanded mode)	50~700mm (± 0.5 mm)
측정 범위 (Range)	정밀모드 (Precise mode)	± 2 kV ($\pm 5\%$)
	확장모드 (Expanded mode)	50~300mm: ± 20 kV ($\pm 10\%$) 301~700mm: ± 20 kV ($\pm 20\%$)
해상도 (Resolution)	정밀모드 (Precise mode)	1V
	확장모드 (Expanded mode)	10V
선형도 (Linearity)	$\pm 5\%$ F.S	
응답 속도 (Response time)	20ms (Can be programmed)	
아날로그 출력 (Analog output)	ARS-S005W1	Output voltage (1~5v)
	ARS-S005U1	Output voltage (0~5v)
	ARS-S005C1	Output current (4~20mA)
통신 (Communication)	RS-485	
사용온도 (Ambient temperature)	0℃ ~ +50℃ (32~122℉)	
사용습도 (Ambient humidity)	35~85%RH (No condensation)	

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

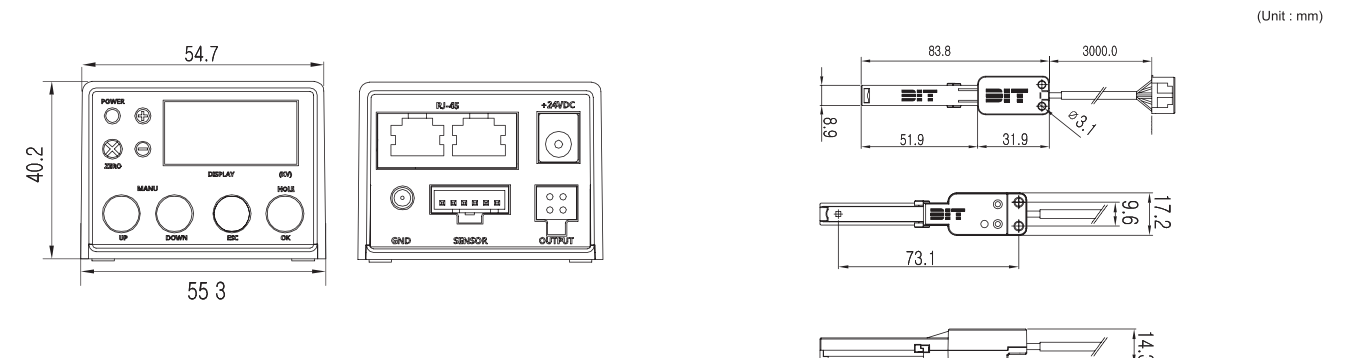


1대의 컴퓨터로 최대 30대의 ARS-S005 Series를 실시간 모니터링 할 수 있습니다.
[RS485통신 사용]
User can monitor up to 30 ARS-S005 Series units in real-time with one computer.
[Using RS485]



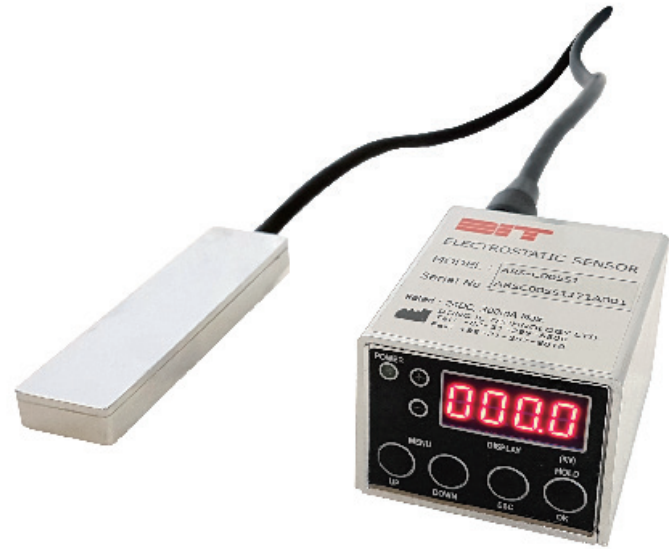
모니터링 프로그램 무료제공 (※ 별도의 UI 변경/제작 불가)
Free monitoring program can be down-loaded on web-site (※ Customizing UI is not available)

제품외관도 / Dimensions



ELECTROSTATIC FIELDMETER

ARM-S050 Series

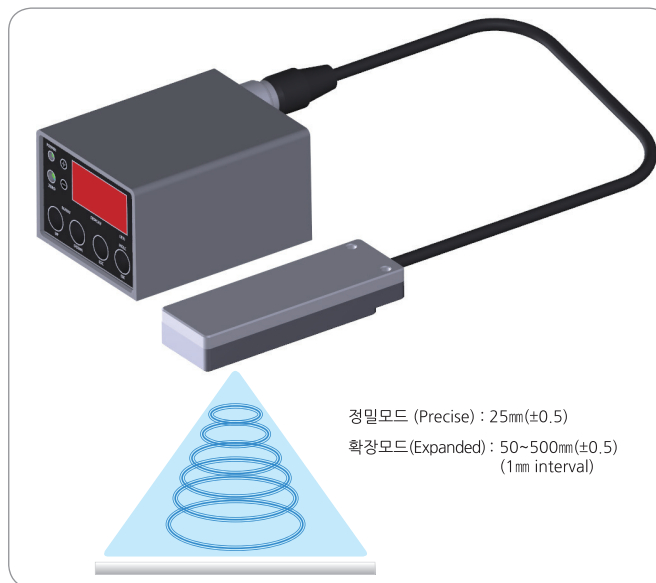


제품사양 / Product Specification

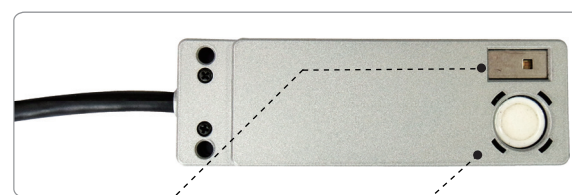
Category	Specification		
	전위 센서 (Electrostatic fieldmeter)	초음파 센서 (Ultrasonic sensor)	
입력 전압 (Input voltage)	+24VDC (±10%)		
소비전류 (Current consumption)	<150mA		
센서 (Sensor)	Oscillating chopper type (DIT)	Reflex type	
측정 거리 (Sensing distance)	정밀모드 (Precise)	25mm (±0.5)	50~500mm (Target :100~100 plate)
	확장모드 (Expanded)	50~500mm (±0.5) (1mm interval)	
측정 범위 (Range)	정밀모드 (Precise)	±2kV (±5%)	
	확장모드 (Expanded)	±20kV (±10%)	
해상도 (Resolution)	정밀모드 (Precise)	1V	0.5mm
	확장모드 (Expanded)	10V	
정확도 (Accuracy)	정밀모드 (Precise)	±2kV (±5%)	50~300mm : ±20kV (±10%) 301~500mm : ±20kV (±20%)
	확장모드 (Expanded)		
선형도 (Linearity)	±5% F.S		
응답 속도 (Response time)	200ms (Can be programmed)		
아날로그 출력 (Analog output)	ARM-S050W1 (1~5V)	None	
	ARM-S050U1 (0~5V)		
	ARM-S050C1 (4~20mA)		
통신 (Communication)	RS-485 Wire(30m) communication		
디스플레이 (Display)	4-DIGIT FND		
외관 (Case)	ABS	Glass-Epoxy	
사용온도 (Ambient temperature)	0℃~50℃		
사용습도 (Ambient humidity)	35~85%RH (No condensation)		

※ 제품의 사양은 성능 개선을 위하여 별도의 통보 없이 변경될 수 있습니다.
Specification is subject to change without notice for the improvement of product performance.

제품장점 / Advantages

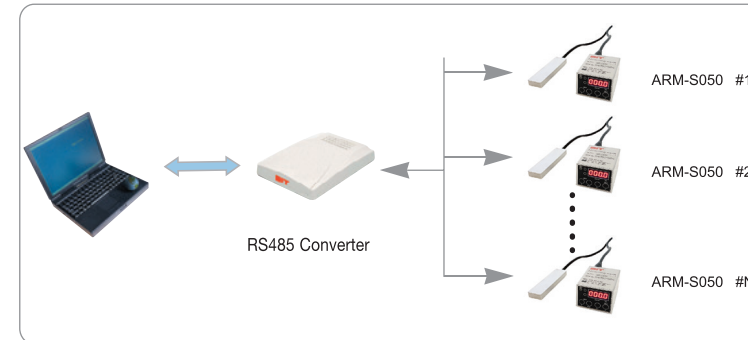


거리에 따른 대전체의 전위값이 자동으로 보정됩니다.
Electrostatic measurement value is automatically revised depending on distance of target.



전위센서와 거리센서가 일체화되었습니다.
Measuring electrostatic and distance simultaneously.

ELECTROSTATIC FIELDMETER



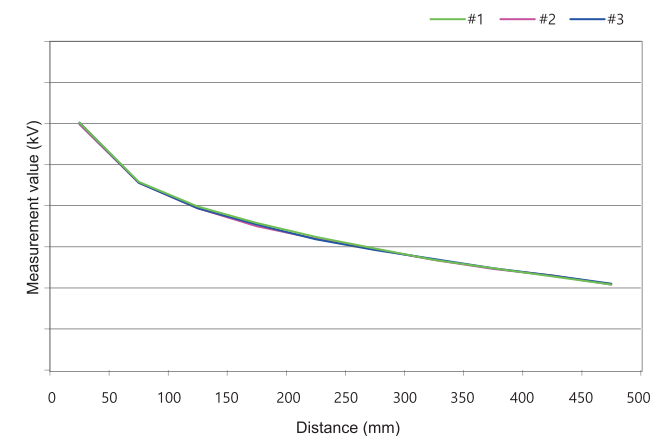
1대의 컴퓨터로 최대 30대의 ARM-S050 Series를 실시간 모니터링 할 수 있습니다.
[RS485통신 사용]
User can monitor up to 30 ARM-S050 Series units in real-time with one computer.
[Using RS485]



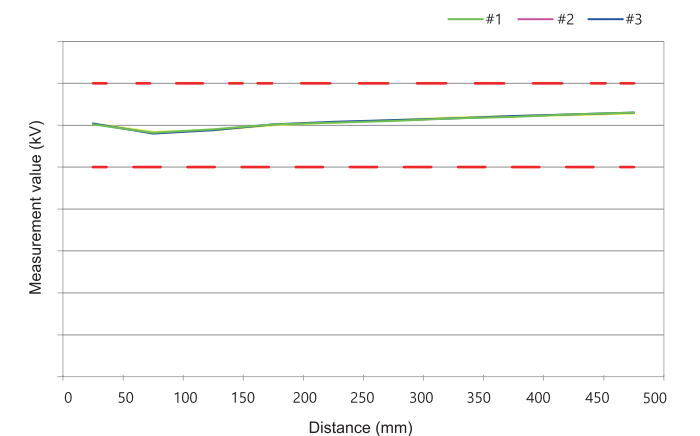
모니터링 프로그램 무료제공 (※ 별도의 UI 변경/제작 불가)
Free monitoring program can be down-loaded on web-site (※ Customizing UI is not available)

측정 그래프 / Measurement Graph

Electrostatic Measurement Value with Distance
(Before Correction)

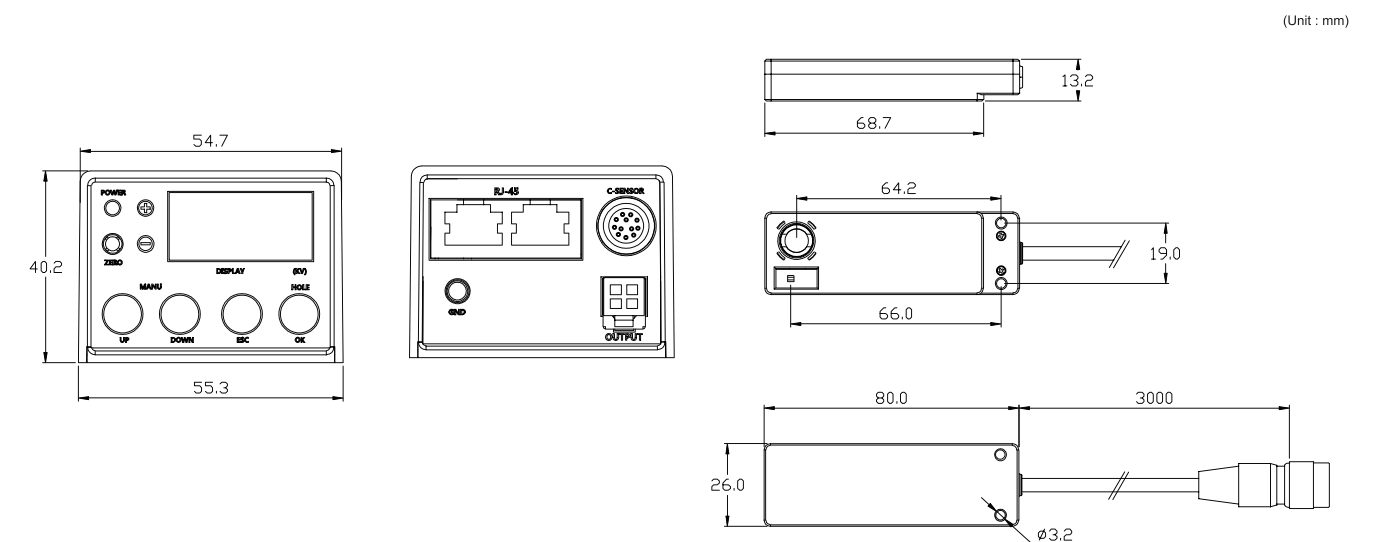


Electrostatic Measurement Value with Distance
(After Correction)



※ 상기 성능그래프는 당사 실험실 기준입니다. (This graph is based on our laboratory environment testing.)

제품외관도 / Dimensions



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