

ION BAR

SIB4A Series

Auto. Ion Volume & Slim Ion Bar



► **Ion Bar** SIB4A Series



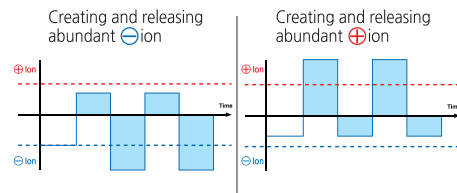
Key Features

- **Stabilized ion creation without any external effects**
- Auto. Ion Volume <SI4A4> **Patent**
 - With slim body, diverse installation is possible
 - Maximized the ion creation via reducing loss of corona discharging
 - Tip Cleaning Alarm (internal timer installed—possible to set tip cleaning period)
 - Output voltage control (8~12.5kVp-p) **Patent**
 - Power jumping function within ion bars (Max. 4 ion bar links) **Patent**
 - Aerodynamic design nozzle socket reduces tip contamination
 - One-touch in/out socket application **Patent**
—Simple to swap new tips & Easy cleaning
 - Fulfilled standization of the least Air consumption (Newly designed Socket minimized the air consumption but maximized the air pressure)
- ▶ **SI4A Series**

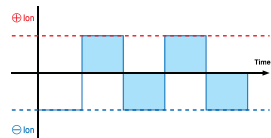


<One-Touch style Nozzle>

+ Auto. Ion Volume



Auto. Ion Volume



- Equal amount of $\oplus$ $\ominus$ ion get released over time
- With Auto Ion Volume Function, no biased $\oplus$ or $\ominus$ ion creation & distribute same amount of both $\oplus/\ominus$ ions

Specifications

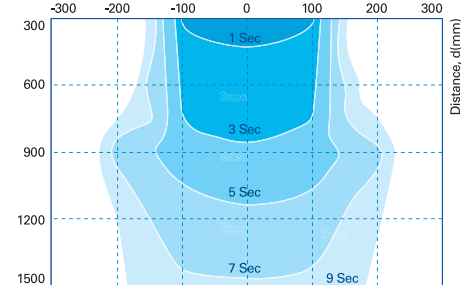
► **SIB4A Series**

Model		SB4A Series		Remark
Input Power		DC24V (±5%)		RJ45
Power Consumption		Max.12W		
Ion-Generation Method		Corona Discharge Pulse AC		
Air Purge Supply Pressure		0.1 ~ 0.5 MPa		Clean Dry Air
Air Purge Connection Port		Pipe Thread 1/8"		
Ion Balance		within ±30V		1,000mm
Ozone(O ₃) Concentration		≤0.05ppm		
Main Body Material		Non-Flammable ABS		Level V0
Electrode Material	Standard	Tungsten		
	Option	Silicon		
Emitter Replacement		Cartridge Type		
Operation Circumstance		0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH		
Dimensions		Please Refer to Dimension Drawing		
Mounting Method		Bolt Mounting with Bracket		
Function		Remote Control		
Adjust	Frequency (Hz)	0.1, 0.3, 1, 3, 5, 8, 10, 20, 30, 50 (10Steps)		
Function	Voltage [Level]	Level 1 ~ 10		
Alarm Function		HV Abnormal Alarm, Tip Cleaning Alarm(Setting)		
Interface	Input	Remote		
	Output	Run State, RS485, Alarm(HV Abnormal, Tip Cleaning)		
Operating Distance		50~2,000mm		
Option		RMS (Real Monitoring System) / SBPRD (DC Power Supply)		
Warranty		1 Year(After 1 year of your purchase)		

+ Decay Time Characteristics

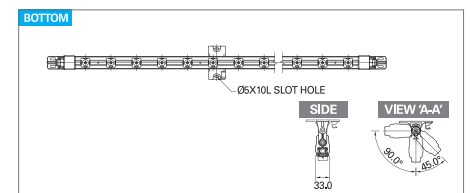
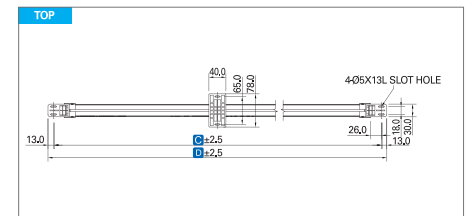
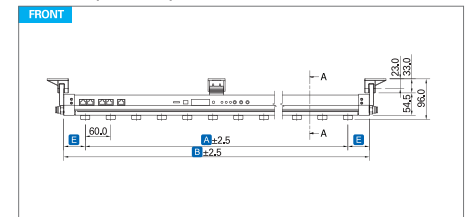
▶ Test Conditions

- Model: SIB4-1000A
- Socket : SJE-4
- Output Voltage : Pulse AC $\pm 10.5\text{ kVp-p}$
- Air Pressure : 0.3MPa
- Decay Time : $\pm 1,000\text{ V}$ to $\pm 100\text{ V}$
- Temperature & Humidity : $24^{\circ}\text{C} \pm 1^{\circ}\text{C}$, $40\% \pm 2\% \text{ RH}$
- Charge Plate Capacitance : $20\text{ pF} \pm 2\text{ pF}$ (150 X 150mm)
- Frequency : 30 Hz



Dimensions

► **Ion Bar** [SIB4-A Series]



▶ [Model : SIB4-1000A~3200A] Dimensions

MODEL / DIMENSION						
No.	MODEL No.	A	B	C	D	E
1	SB4-1000A	900	1001	1052	1078	50,5
2	SB4-1200A	1140	1241	1292	1318	50,5
3	SB4-1300A	1260	1361	1412	1438	50,5
4	SB4-1500A	1380	1481	1532	1558	50,5
5	SB4-1600A	1500	1601	1652	1678	50,5
6	SB4-1700A	1620	1721	1772	1798	50,5
7	SB4-1800A	1740	1841	1892	1918	50,5
8	SB4-2000A	1860	1961	2012	2038	50,5
9	SB4-2100A	1980	2081	2132	2158	50,5
10	SB4-2200A	2100	2201	2252	2278	50,5
11	SB4-2300A	2220	2321	2372	2398	50,5
12	SB4-2500A	2340	2441	2492	2518	50,5
13	SB4-2700A	2580	2681	2732	2758	50,5
14	SB4-3000A	2820	2921	2972	2998	50,5
15	SB4-3200A	3060	3161	3212	3238	50,5

ION BAR

Auto. Duty Slim Ion Bar



▶ **Ion Bar SIB4 Series**



- Depending on the polarity, automatically distributes/controls ion
—Auto, Duty <SI84> **Patent**
- With slim body, diverse installation is possible
- Maximized the ion creation via reducing loss of corona discharging
- Tip Cleaning Alarm (internal timer installed—possible to set tip cleaning period)
- Output voltage control(8~12.5kVp-p) **Patent**
- Power jumping function within ion bars (Max. 4 ion bar links) **Patent**
- Aerodynamic design nozzle socket reduces tip contamination
- One-touch in/out socket application **Patent**
—Simple to swap new tips & Easy cleaning
- Fulfilled standardization of the least Air consumption (Newly designed Socket minimized the air consumption but maximized the air pressure)

► **SI B4 Series**



<One-Touch style Nozzle>

- Initial Setting

Ejects same amount of $\oplus/\ominus$ ion
- **Negative**-polar target object

More $\oplus$ ion ejection compared to $\ominus$ ion
- **Positive**-polar target object

More $\ominus$ ion ejection compared to $\oplus$ ion

※But, the distance from ion bar to target object should be within 100mm,
voltage level of target object should exceed $\pm 3kV$

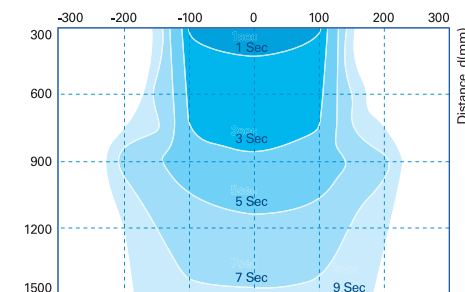
▶ Any biased polarity occurs, Auto Ion Volume Function controls the equal distribution of both positive and negative polarities

► **SIB4 Series**

Model		SIB4 Series	Remarks
Input Power		DC24V (±5%)	RJ45
Power Consumption		Max.12W	
Ion-Generation Method		Corona Discharge Pulse AC	
Air-Purge Supply Pressure		0.1 ~ 0.5 MPa	Clean Dry Air, N ₂
Air-Purge Connection Port		Pipe Thread 1/8"	
Ion Balance		within ±30V	1,000mm
Ozone(O ₃) Concentration		≤0.05ppm	
Main Body Material		Non-Flammable ABS	Level V0
Electrode Material	Standard	Tungsten	
	Option	Silicon	
Emitter Replacement		Cartridge Type	
Operation Circumstance		0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH	
Dimensions		Please Refer to Dimension Drawing	
Mounting Method		Bolt Mounting with Bracket	
Function		Remote Control	
Adjust Function	Frequency [Hz]	0.1, 0.3, 1, 3, 5, 8, 10, 20, 30, 50 (10Steps)	
	Voltage [Level]	Positive 1 ~ 10, Negative 1 ~ 10	
	Duty Ratio [%]	40 ~ 70	
Auto Duty		Mode Set	Distance 50~100mm
Alarm Function		H/V Abnormal Alarm, Tip Cleaning Alarm(Setting)	
Interface	Input	Remote	
	Output	Run State, RS485, Alarm(H/V Abnormal, Tip Cleaning)	
Operating Distance		50~2,000mm	
Option		RMS (Real Monitoring System) / SBPRD (DC Power Supply)	
Warranty		1Year(After 1 year of your purchase)	

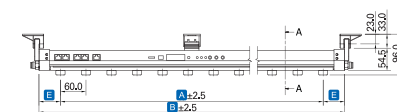
▶ Test Conditions

- Model: SIB4-1000
- Socket : SIE-4
- Output Voltage : Pulse AC $\pm 10.5\text{kVp-p}$
- Air Pressure : 0.3MPa
- Decay Time : $\pm 1,000\text{V}$ to $\pm 100\text{V}$
- Temperature & Humidity : $24^{\circ}\text{C} \pm 1^{\circ}\text{C}$, $40\% \pm 2\%\text{RH}$
- Charge Plate Capacitance : $20\text{pF} \pm 2\text{pF}$ (150 X 150mm)
- Frequency : 30 Hz

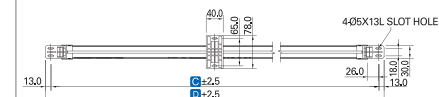


► **Ion Bar** [SIB4 Series]

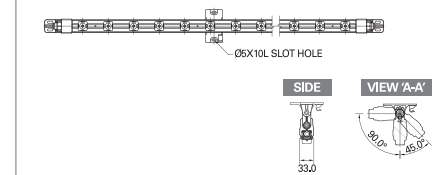
FRONT



[TOP](#)



BOTTOM



▶ [Model : SIB4-800~3200] Dimensions

		MODEL / DIMENSION				
No.	MODEL No.	A	B	C	D	E
1	SB4-800	660	800	851	877	70
2	SB4-900	780	881	932	958	50.5
3	SB4-1000	900	1001	1052	1078	50.5
4	SB4-1200	1140	1241	1292	1318	50.5
5	SB4-1300	1260	1361	1412	1438	50.5
6	SB4-1500	1380	1481	1532	1558	50.5
7	SB4-1600	1500	1601	1652	1678	50.5
8	SB4-1700	1620	1721	1772	1798	50.5
9	SB4-1800	1740	1841	1892	1918	50.5
10	SB4-2000	1860	1961	2012	2038	50.5
11	SB4-2100	1980	2081	2132	2158	50.5
12	SB4-2200	2100	2201	2252	2278	50.5
13	SB4-2300	2220	2321	2372	2398	50.5
14	SB4-2500	2340	2441	2492	2518	50.5
15	SB4-2700	2580	2681	2732	2758	50.5
16	SB4-3000	2820	2921	2972	2998	50.5
17	SB4-3200	3060	3161	3212	3238	50.5

ION BAR

Mini. Ion Bar



► **Ion Bar SIB7 Series**



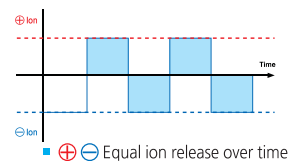
- All-in-one mini, ion bar (eg. controller internally installed)
—possible to install in narrow space
- Stabilized ion creation without any external effects
- Auto. Ion Volume (SIB7A) **Patent**
- Maximized the ion creation via reducing loss of corona discharging
- Power jumping function within ion bars (Max. 4 ion bar links) **Patent**
- Aerodynamic design nozzle socket reduces tip contamination
- One-touch in/out socket application **Patent**
—Simple to swap new tips & Easy cleaning
- Fulfilled standization of the least Air consumption (Newly designed Socket minimized the air consumption but maximized the air pressure)

► **SIB7A/SIB7 Series**



〈One-Touch style Nozzle〉

Auto. Ion Volume



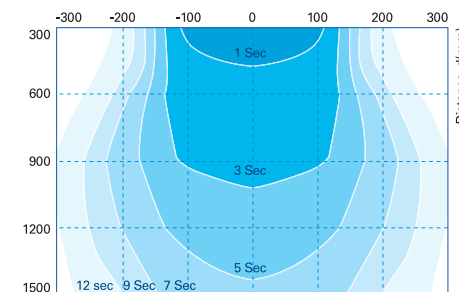
- ▶ With Auto Ion Volume Function, no biased $\oplus$ or $\ominus$ ion creation & distribute same amount of both $\oplus/\ominus$ ions

► **SIB7 Series**

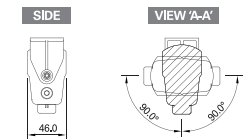
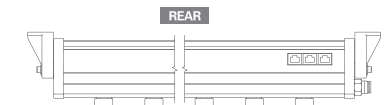
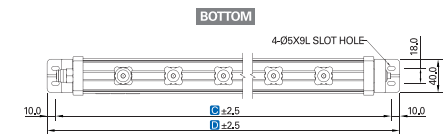
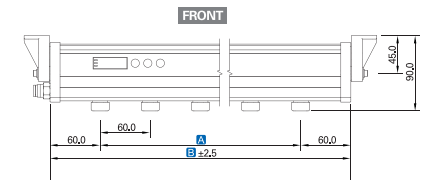
Model		SIB7 / SIB7A Series		Remark	
Input Power		DC24V (±5%)		RJ45	
Power Consumption		Max. 78W			
Ion-Generation Method		Corona Discharge Pulse AC			
Air Purge Supply Pressure		0.1 ~ 0.5 MPa		CDA(Clean Dry Air)	
Air Purge Connection Port		Pipe Thread 1/8"			
Ion Balance		within ±30V		1,000mm	
Ozone(O ₃) Concentration		≤0.05ppm			
Main Body Material		Non-Flammable ABS		Level V0	
Electrode	Standard	Tungsten			
Material	Option	Silicon			
Emitter Replacement		Cartridge Type			
Operation Circumstance		0℃ ~ +50℃ (32℉ ~ 122℉), 35% ~ 85% RH			
Dimensions		Please Refer to Dimension Drawing			
Mounting Method		Bolt Mounting with Bracket			
Adjust Function	Frequency [Hz]	0.1, 0.3, 1, 3, 5, 8, 10, 20, 30, 50 (10Steps)			
	Duty Ratio [%]	40~70%		SIB7 Only	
	Voltage [Level]	Level 1 ~ 10			
Alarm Function		HV Abnormal Alarm			
Interface	Input	Remote			
	Output	Run State, Alarm(HV Abnormal)		RJ45	
Operating Distance		50~2,000mm			
Option		SBPRD (DC Power Supply)			
Warranty		1 Year(After 1 year of your purchase)			

► **Test Conditions**

- Model : SIB7-540
- Socket : SIE-4
- Output Voltage : Pulse AC $\pm 10.5\text{kVp-p}$
- Air Pressure : 0.3MPa
- Decay Time : $\pm 1,000\text{V}$ to $\pm 100\text{V}$
- Temperature & Humidity : $24^{\circ}\text{C} \pm 1^{\circ}\text{C}$, $44\% \pm 2\%$ RH
- Charge Plate Capacitance : 20pF (150 X 150 mm)
- Frequency : 30 Hz



▶ **Ion Bar** [SIB7 / SIB7A Series]



▶ [Model : SIB7-360~540] Dimensions

MODEL	A	B	C	D
SIB7-360	240	360	402	422
SIB7-540	420	540	582	602

▶ [Model : SIB7-600A~900A] Dimensions

MODEL	A	B	C	D
SB7-600A	480	600	642	662
SB7-660A	540	660	702	722
SB7-780A	660	780	822	842
SB7-900A	780	900	942	962

ION BAR

SIB1 Series

Pulse AC Slim Ion Bar



Key Features

- External controller type: Pulse AC ion bar 
- Max 4 connections using external Controller(SBP-11N),  Note that SBP-06 is one-to-one connection
- Small / slim body→easy to install in narrow space
- Various length of ion bar for numerous installing environment

Specifications

SIB1 Series		
Model	SIB1 Series	Remarks
Input Power	-	
Power Consumption	-	
Ion-Generation Method	Corona Discharge Pulse AC	
Air Purge Supply Pressure	0.1 ~ 0.5 MPa ≤ 0.3MPa SIB1-16A ~ SIB1-48A ≤ 0.5MPa SIB1-64A ~ SIB1-256A	Clean Dry Air N ₂
Air Purge Connection Port	Pipe Tap 1/8"	
Ion Balance	within ±50V	1,000mm
Ozone(O ₃) Concentration	≤0.05ppm	
Main Body Material	Non-Flammable ABS	Level V0
Electrode Material	Standard Option	Tungsten Silicon
Emitter Replacement	Cartridge Type	
Operation Circumstance	0℃ ~ +50℃ (32℉ ~ 122℉), 35% ~ 85% RH	
Dimensions	Please Refer to Dimension Drawing	
Mounting Method	Bolt Mounting with Bracket	
Function	-	
Adjust	Frequency [Hz]	-
Function	Voltage [Level]	-
	Alarm Function	-
	Interface	-
Operating Distance	50~2,000mm	
High Voltage Cable	Shielding Wire 4m(UL3239 20kV - 1007AWG18)	Standard
Warranty	1 Year(After 1 year of your purchase)	

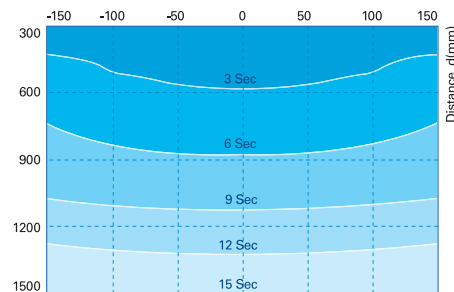
Power Controller [SBP-06 / SBP-11N]			
Model	SBP-06	SBP-11N	Remarks
Input Power	AC100~240V, 50/60Hz		
Output Voltage[Max.]	Pulse AC 12 kVp-p(Max.)		
Power Consumption	16W	23W	AC 220V
Current Consumption	72mA	104mA	
Output Port	1 Port	4 Port	
Alarm	N/A	H/V Abnormal Alarm	
Weight	1.42kg	2.48kg	
Main Body Material	EGJ	Stainless Steel	
Ion Bar Number Connectable	1 Sets	4 Sets (Max.)	UTP Cable(SBP-11N)
Dimensions		Please Refer to Dimension Drawing	
Interface		-	Remote, Alarm
Function	Frequency [Hz]	30Hz(it can be Changed) 1, 3, 5, 8, 10, 20, 30 (7Steps)	
	Duty Ratio [%]	40 ~ 60 40 ~ 60 (100 Unit)	

※ SBP-11N cannot control individual ion bar, we suggest customer to use 2 ion bar with each controller.

Decay Time Characteristics

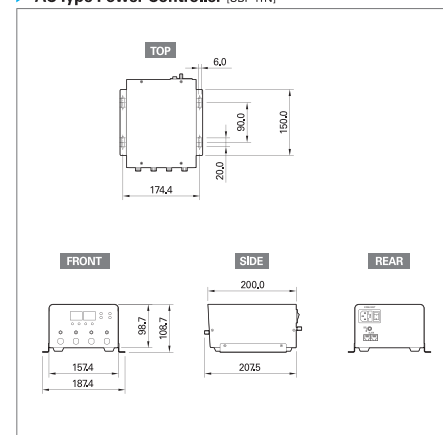
Test Conditions

- Model : SIB1-160A / SBP-11N
- Socket : SIE-1
- Output Voltage : AC 10.5kVp-p(P-06, N-06)
- Air Pressure : 0.3MPa
- Decay Time : ±1,000V to ±100V
- Temperature & Humidity : 24℃ ± 1℃, 40% ± 2%RH
- Charge Plate Capacitance : 20pF ± 2pF (150 X 150mm)
- Frequency : 30 Hz

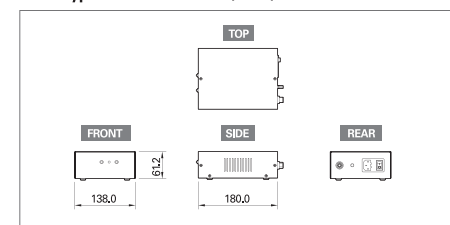


Dimensions

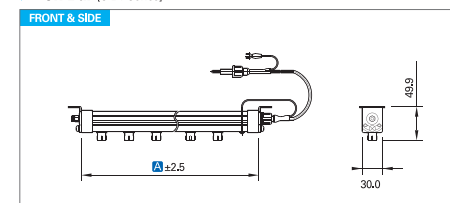
AC Type Power Controller [SBP-11N]



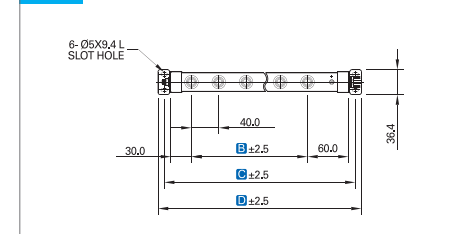
AC Type Power Controller [SBP-06]



Ion Bar [SIB1-Series]



BOTTOM



[Model : SIB1-16A ~ 256A] Dimensions

MODEL	A	B	C	D
SIB1-16A	170	80	190	208
SIB1-32A	330	240	350	368
SIB1-48A	490	400	510	528
SIB1-64A	650	560	670	688
SIB1-80A	810	720	830	848
SIB1-96A	970	880	990	1008
SIB1-112A	1130	1040	1150	1168
SIB1-128A	1290	1200	1310	1328
SIB1-144A	1450	1360	1470	1488
SIB1-160A	1610	1520	1630	1648
SIB1-176A	1770	1680	1790	1808
SIB1-192A	1930	1840	1950	1968
SIB1-208A	2090	2000	2110	2128
SIB1-224A	2250	2160	2270	2288
SIB1-240A	2410	2320	2430	2448
SIB1-256A	2570	2480	2590	2608

ION BAR

SDB Series

DC Slim Ion Bar



Key Features

- Maimized static performance using DC High Voltage
- Since it crease high volume of ion, it is suitable for fast moving or HV required area
- 2 SDB Series Ion Bar can be connected to 1 SBC Series 
- Various length of ion bar for numerous installing environment
- Small / slim body → easy to install in narrow space

Specifications

SDB Series		
Model	SDB Series	Remarks
Input Power	-	
Power Consumption	-	
Ion-Generation Method		Corona Discharge DC
		0.1 ~ 0.5 MPa
Air Purge Supply Pressure	≤ 0.3MPa	Clean Dry Air, N ₂
	≤ 0.5MPa	
Air Purge Connection Port		Pipe Tap 1/8"
Ion Balance		-
Ozone(O ₃) Concentration		≤0.05ppm
Main Body Material		Non-Flammable ABS
		Level V0
Electrode Material	Standard	Tungsten
	Option	-
Emitter Replacement		Cartridge Type
Operation Circumstance		0°C ~ +50°C (32°F ~ 122°F), 35% ~ 85% RH
Dimensions		Please Refer to Dimension Drawing
Mounting Method		Bolt Mounting with Bracket
Function		-
Adjust	Frequency [Hz]	-
	Voltage [Level]	-
Alarm Function		-
Interface		-
Operating Distance		50~2,000mm
High Voltage Cable		Withstand Voltage : 40kV DC, 4m
Warranty		1Year(After 1 year of your purchase)

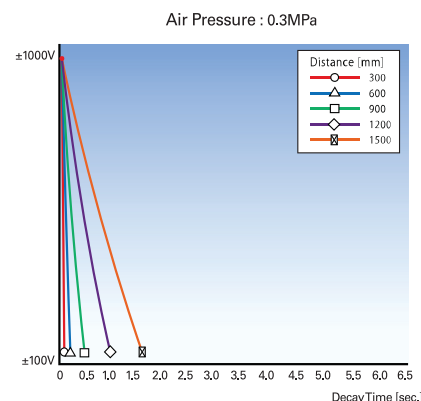
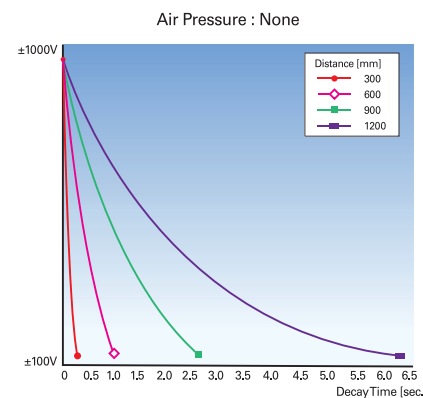
Power Controller* [SBC Series]

Model	SBC-2PN	SBC-2P	SBC-2N	Remarks
Input Power	AC100~240V, 50/60Hz			
Output Voltage(Max.)	DC ±11kV	DC +11kV	DC -11kV	
Power Consumption	Max. 35W			AC 220V
Current Consumption	Max. 159mA			
Output Port	2 Port			
Alarm	H/V Abnormal			
Weight	4.5kg			
Main Body Material	EGI			
Ion Bar Number Connectable		2EA		
Dimensions		Please Refer to Dimension Drawing		
Interface		Run, Stop, Alarm Ch1, Alarm Ch2		
Function	Frequency [Hz]	-		
	Duty Ratio [%]	-		
Warranty		1Year(After 1 year of your purchase)		

Decay Time Characteristics

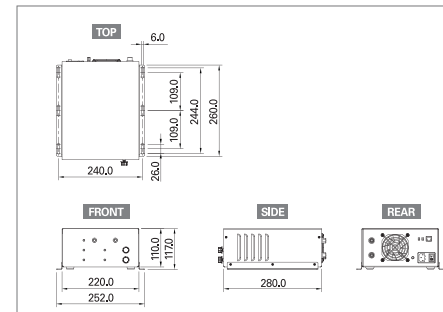
Test Conditions

- Model: SDB-64 / SBC-2PN
- Socket : SIE-1
- Output Voltage : DC +8kV ~ +11kV / DC -8kV ~ -11kV
- Air Pressure : None / 0.3MPa
- Decay Time : ±1,000V to ±100V
- Temperature & Humidity : 24°C ± 1°C, 40% ± 2%RH
- Charge Plate Capacitance : 20pF ± 2pF (150 X 150mm)
- Frequency : N / A

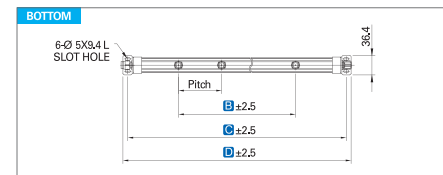
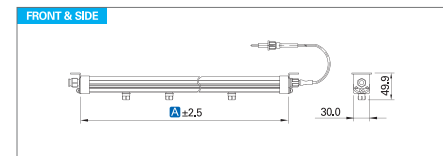


Dimensions

DC Type Power Controller [SBC-Series]



Ion Bar [SDB-Series]



[Model : SDB-16 ~ 256] Dimensions

MODEL	A	B	C	D	Pitch
SDB-16	170	80	190	208	40
SDB-32	330	240	350	368	40
SDB-48	490	400	510	528	40
SDB-64	650	480	670	688	80
SDB-80	810	640	830	848	80
SDB-96	970	800	990	1008	80
SDB-112	1130	960	1150	1168	80
SDB-128	1290	1120	1310	1328	80
SDB-144	1450	1280	1470	1488	80
SDB-160	1610	1440	1630	1648	80
SDB-176	1770	1600	1790	1808	80
SDB-192	1930	1760	1950	1968	80
SDB-208	2090	1920	2110	2128	80
SDB-224	2250	2080	2270	2288	80
SDB-240	2410	2240	2430	2448	80
SDB-256	2570	2400	2590	2608	80