

Ion Bar

Electrostatic Total Solution

SIB1 Series

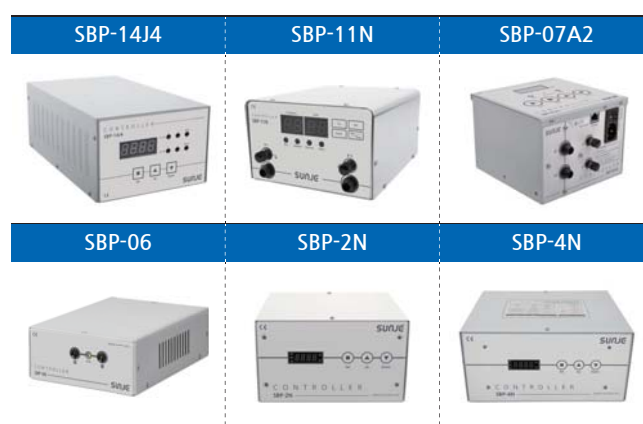
SIB1 Series is the external controller type ion bar.
Due to small and slim body, It can be installed in a narrow space easily. We provide diverse lengths.
Its maintenance is simple, by replacing emitter socket.



Key Features

- External Controller Type Ion Bar
- Max. 4ea connections using external controller
Max. 4ea : SBP-14J4, SBP-4N
Max. 2ea : SBP-07A2, SBP-2N, SBP-11N, SBP-06
- Small / Slim body → Easy to install in a narrow space
- Various length of ion bar for numerous installing environment

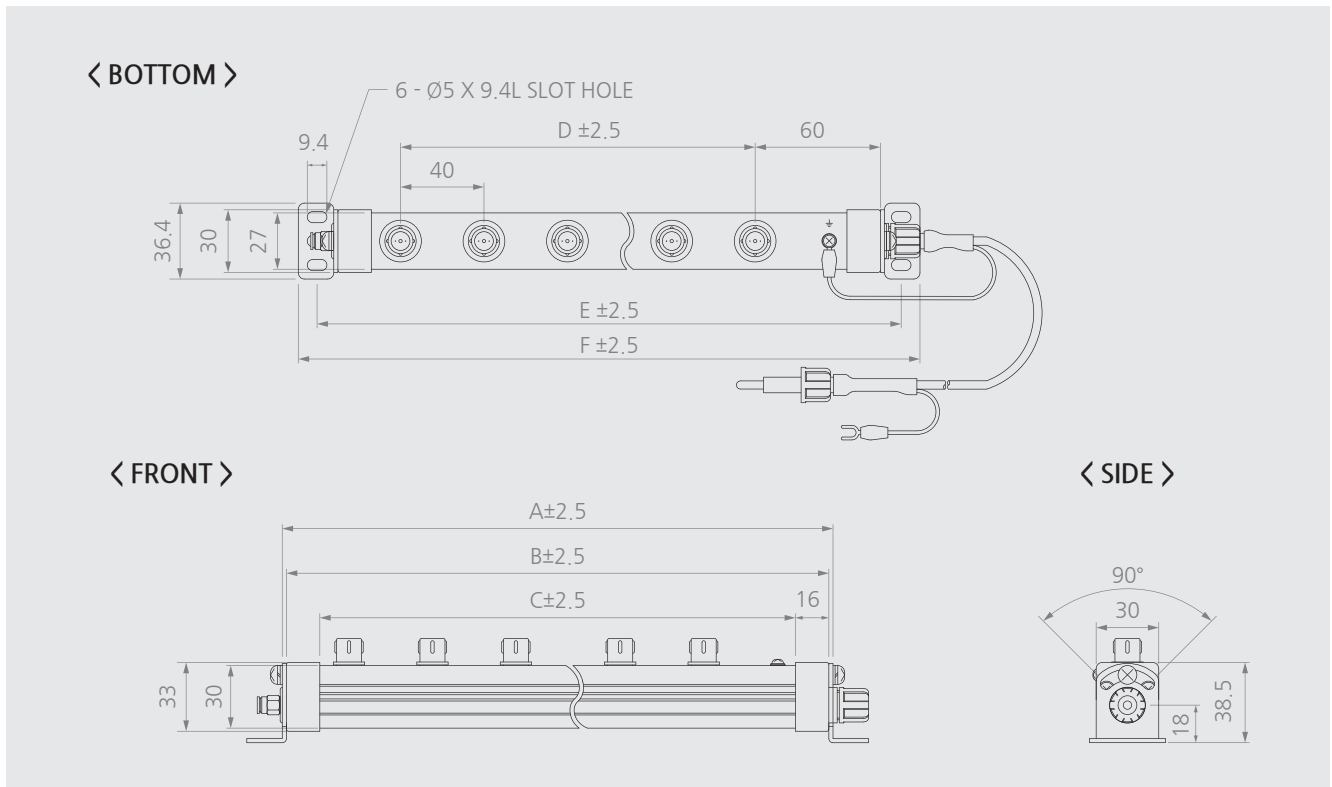
Connectable Products



Specifications

Parameter	Description / Value	Remarks
Ion-Generation Method	Corona Discharge Pulse AC	
Air Purge Supply Pressure	≤0.3MPa	CDA, N ₂ (No condensation)
Air Purge Connection Port	Pipe Thread 1/8"	
Ion Balance	within ±50V (1,000mm)	
Operating Distance	50mm ~ 2,000mm	
Operation Circumstance	0°C ~ +50°C(32°F ~ 122°F), 35% ~ 85% RH	
Ozone(O ₃) Concentration	≤0.05ppm	
Main Body Material	Non-Flammable ABS (Level V0)	
Electrode Material	Standard : Tungsten	
	Option : Silicon	
Electrode Replacement	Cartridge type	
Mounting Method	Bolt Mounting with Bracket	
High Voltage Cable	Insulation Cable 4m	UL3239_20kV - 1007AWG18
Warranty	1 year	

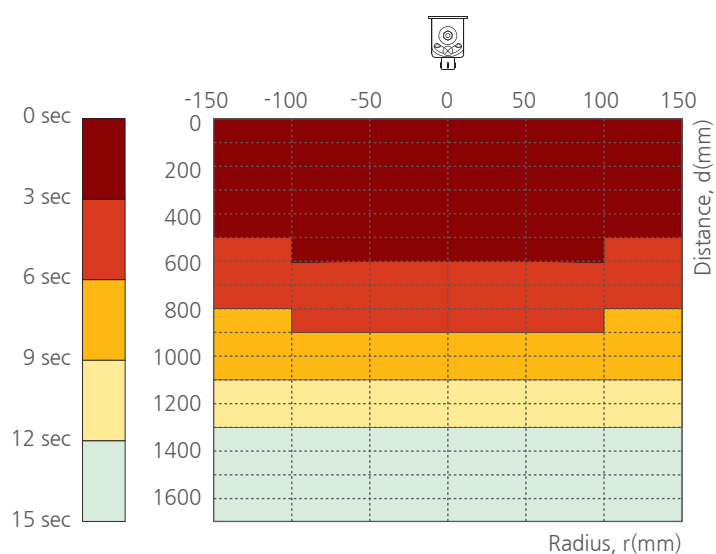
※ The appearance and specification of the product may be changed without prior notice for the improvement of the product.

Dimensions

No.	Model No.	Tip Q'ty	A	B	C	D	E	F	Middle BKT Q'ty
1	SIB1-07A	1	94	90	58	-	110	128	-
2	SIB1-16A	3	174	170	138	80	190	208	-
3	SIB1-20A	4	214	210	178	120	230	248	-
4	SIB1-32A	7	334	330	298	240	350	368	-
5	SIB1-48A	11	494	490	458	400	510	528	-
6	SIB1-64A	15	654	650	618	560	670	688	-
7	SIB1-80A	19	814	810	778	720	830	848	-
8	SIB1-96A	23	974	970	938	880	990	1008	-
9	SIB1-112A	27	1134	1130	1098	1040	1150	1168	-
10	SIB1-128A	31	1294	1290	1258	1200	1310	1328	-
11	SIB1-144A	35	1454	1450	1418	1360	1470	1488	-
12	SIB1-160A	39	1614	1610	1578	1520	1630	1648	1
13	SIB1-176A	43	1774	1770	1738	1680	1790	1808	1
14	SIB1-192A	47	1934	1930	1898	1840	1950	1968	1
15	SIB1-208A	51	2094	2090	2058	2000	2110	2128	2
16	SIB1-224A	55	2254	2250	2218	2160	2270	2288	2
17	SIB1-240A	59	2414	2410	2378	2320	2430	2448	2
18	SIB1-256A	63	2574	2570	2538	2480	2590	2608	3

Decay Time Characteristics

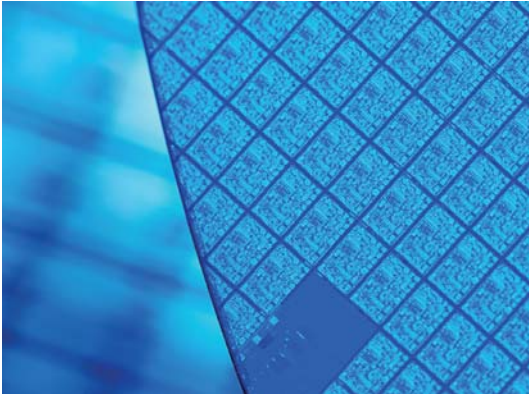
- Model : SIB1-160A / SBP-11N
- Socket : SIE-1
- Output Voltage : AC 10.5kVp-p(P-06, N-06)
- Air Pressure : 0.3MPa
- Decay Time : $\pm 1,000\text{V}$ to $\pm 100\text{V}$
- Temperature & Humidity : $24^{\circ}\text{C} \pm 1^{\circ}\text{C}$, $40\% \pm 2\%\text{RH}$
- Charge Plate Capacitance : $20\text{pF}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

**Connectable Controllers and Functions**

Function		Controller					
		SBP-14J4	SBP-11N	SBP-2N	SBP-4N	SBP-06	SBP-07A2
Method of Ion generation		Pulsed AC (Low frequency)					AC
Interface	Realtime Monitoring	O	X	O	O	X	X
	Remote Control	O	X	O	O	X	O
	Alarm Output	O	O	O	O	X	O
	Run/Stop state	O	O	O	O	X	O
Adjustable Function	Amplitude	O	O	O	O	X	O
	Frequency	O	O	O	O	X	X
	Duty	O	O	O	O	O	O
Connectable bar Q'ty [Max]		4	2	2	4	2	2

Ionizer Applications

Electrostatic Total Solution



Semiconductors

Due to the miniaturization of semiconductors and the increased circuit integration, semiconductors have become more vulnerable to static electricity.

Static electricity can damage or destroy internal circuits and cause device malfunctions, making its elimination essential.



Liquid crystal / Organic EL displays

As the size and resolution of LCD and OLED displays continue to increase, numerous static electricity issues arise during production. How quickly static electricity is removed from the larger surface area is directly tied to production yield, making it a critical factor.



Films

Static electricity generated by the pressure and friction between the film and rollers produces sparks that damage (perforation) the film, cause foreign substances to adhere, reduce post-processing efficiency, and create safety hazards due to static shocks. In particular, during winding and unwinding, static charges can reach up to several hundred thousand kilovolts, yet static elimination devices are capable of neutralizing them even under such harsh conditions.



Plastic injection molding

During plastic injection molding, a significant amount of static electricity is generated due to friction and peeling. This static charge causes foreign substances to adhere inside the injection molding machine, leading to defects, and prevents molded products from separating from the mold. As a result, operators must frequently detach the parts manually, which increases labor requirements and negatively affects both production yield and efficiency.

Using a static elimination device can resolve these issues.

Ionizer Applications

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Powder

Static generated by friction among powder particles causes them to adhere to feed ports and containers. This adhesion interferes with uniform packaging, reducing both production efficiency and yield. Additionally, under certain conditions, it may lead to serious outcomes like explosions. Sunje's photoionization static elimination device effectively addresses static issues in situations where airflow must be minimized, such as in powder handling.



Printing

Static electricity on paper and film can lead to various issues, such as ink smearing, ink scattering, uneven powder deposition, double-sheet feeding, adherence during paper transport, paper jams, and misalignment. Because printing processes are sequential, a static issue in any one step can impact subsequent steps, resulting in time delays and financial losses.



Rechargeable Batteries

To manufacture secondary batteries, a dry cleanroom and low-humidity environment are essential. These conditions are particularly prone to static buildup, making the neutralization of static charges crucial. Sunje's static elimination device prevents separator film damage (e.g., perforation) and contamination, thereby reducing product defects and increasing yield.



Coating / Painting

Coating and painting are widely used in many fields, including metal and plastic automotive parts. Static electricity generated during the coating/painting process can cause materials to smear or scatter and attract contaminants, resulting in decreased quality. Additionally, due to process characteristics, large quantities of flammable gases may be present, which under certain conditions can lead to serious consequences such as explosions. Sunje's static elimination device can prevent these issues and enhance overall quality.