

# Soft X-ray Ionizer

## Electrostatic Total Solution

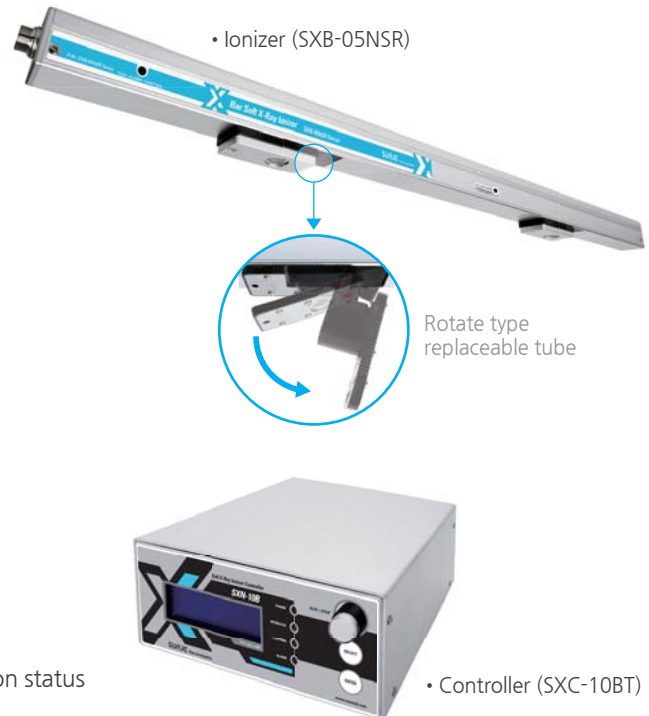
### SXB-05NSR



Superior performance is derived from applied high current technology. This is bar type ionizer having 1 to 9 X-ray windows so that is effective for ionizing wide area. Slim size is useful to be installed in various conditions and module structure (Rotate type replaceable tube) makes it easy to replace.

### Key Features

- Superior performance with high current version compared to low current 5kV products
- The smallest size in the same line of products (possible to ionize on the surface and rear side)
- No CDA needed, No scattering particle problem.
- $\pm 0V$  Ion Balance.
- Managing process under 100V constant voltage.
- Easy attachable/detachable Module structure.
- Purchasing by the individual parts brings economic savings.
- With RMS(Real Monitoring System), possible to check operation status in real time. (Option) Patent



### Specifications

- Ionizer (SXB-05NSR)

Parameter	Description / Value
Ion Generation Method	Soft X-ray
Source	Soft X-ray Tube
Tube Voltage	4.9kV
Beam Angle	150°
Power Consumption (With Cont.)	Max. 150W
Operation Circumstance	0°C ~ +50°C(32°F ~ 122°F), 35% ~ 85% RH
Warranty	1 year

- Controller (SXC-10BT)

Parameter	Description / Value
Input Power	AC 100~240V, 50/60Hz
Power Consumption (With Bar)	Max. 130W
Operation Circumstance	0°C ~ +50°C(32°F ~ 122°F), 35% ~ 85% RH
Alarm Function	H/V Abnormal, Communication Error
Interface	Run, Alarm, Power, Over Time, Remote, Interlock
Controller Fuse	250V, 3A, 5X20 Glass Type Fuse
Weight	1.05kg
Warranty	1 year

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

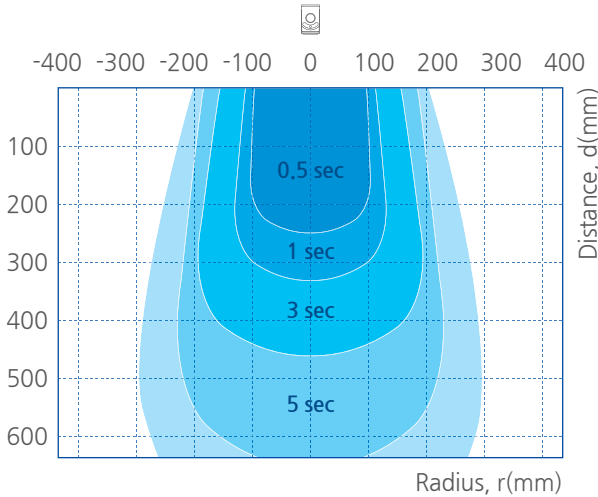
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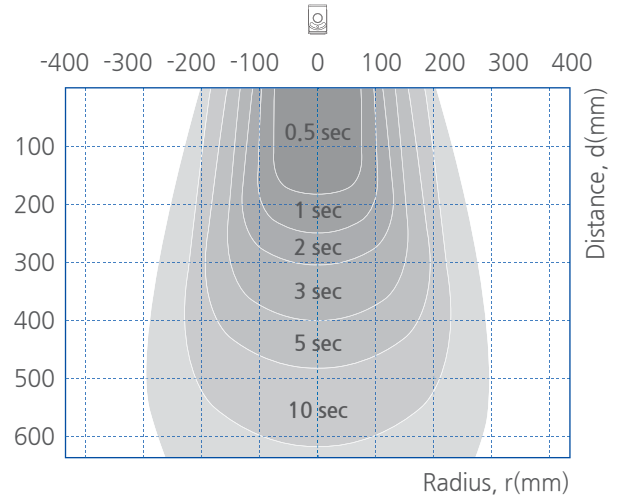
## Comparison of high and low current performance

- Decay Time : ±1,000V to ±100V
- Charge Plate Capacitance : 20pF (150 X 150mm)
- Temperature & Humidity : 24°C, 50%RH

Model : SXB-05NSR-700-2 (High Current)



Model : SXB-05NSR-900-3 (low Current)

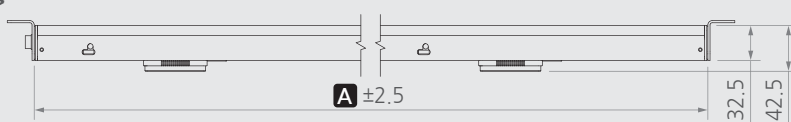


## Dimensions

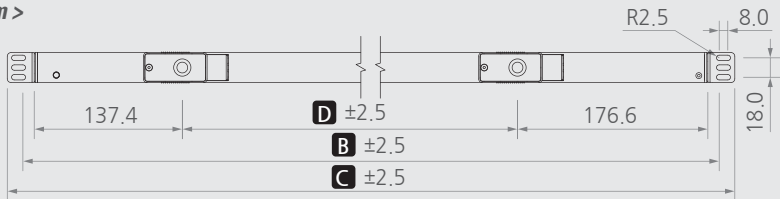
< Top >



< Front >



< Bottom >



< Side >



No.	Model No.	A	B	C	D	Tube q'ty
1	SXB-05NSR-300-1	314	335	3364	-	1
2	SXB-05NSR-600-2	625	646	675	311	2
3	SXB-05NSR-900-3	936	957	986		3
4	SXB-05NSR-1200-4	1247	1268	1297		4
5	SXB-05NSR-1500-5	1558	1579	1608		5
6	SXB-05NSR-1800-6	1869	1890	1919		6
7	SXB-05NSR-2200-6	2180	2201	2230	373.2	6
8	SXB-05NSR-2200-7	2180	2201	2230	311	7
9	SXB-05NSR-2500-8	2491	2512	2541		8

No.	Model No.	A	B	C	D	Tube q'ty
10	SXB-05NSR-2800-9	2802	2823	2852	311	9
11	SXB-05NSR-700-2	734	755	784	420	2
12	SXB-05NSR-1100-3	1154	1175	1204		3
13	SXB-05NSR-1500-4	1574	1595	1624		4
14	SXB-05NSR-2000-5	1994	2015	2044		5
15	SXB-05NSR-2400-6	2414	2435	2464		6
16	SXB-05NSR-2800-7	2834	2855	2884		7
17	SXB-05NSR-3200-8	3254	3275	3304		8
18	SXB-05NSR-3600-9	3674	3695	3724		9

# Radiation Shielding methods

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## What are soft X-rays?

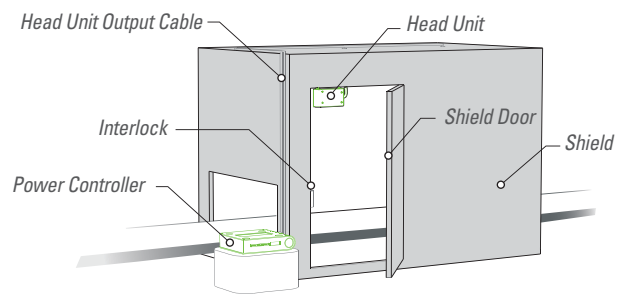
X-ray can be sorted according to its penetrating power, and an X-ray which has weaker penetrating power that can be absorbed easily in thin layer of the air is called the soft X-ray.

### Benefits of Soft X-ray ionizer

- Perfect Ion Balance ( $\pm 0V$ )
- No CDA (Clean Dry Air) required
- No dust generation
- No ozone (O3) generation
- High ion generation density
- Static electricity can be removed even under inert gas conditions such as N2 and Ar

## Shield installation compositions

- \* Please be careful to avoid direct exposure from the soft X-ray, since it may cause any skin problems. Therefore, you need to shield the area where X-ray emits in order to protect yourself.
- \* Please keep in mind that allowed leakage level for radiation dose is  $1\mu Sv/hr$  or under, So keep your area under the mentioned level all the time. (The leakage level of radiation dose might differ in countries)
- \* Please refer to the below chart for possible materials of shielding and its acceptable thickness.



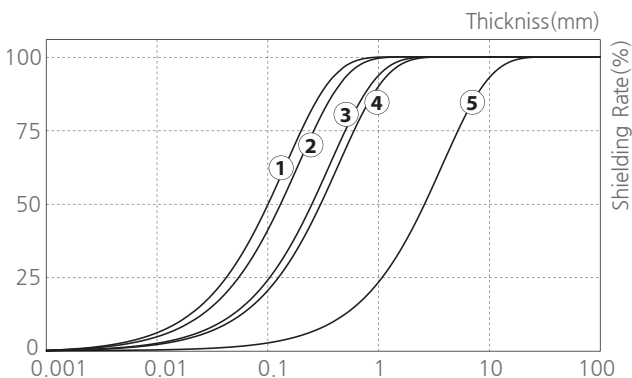
### Radiation

With radiation You can ionize some substance, Energy flow that radiated substance generates.

Radiation is neither accumulated nor contaminated. Due to uncertainty that human cannot judge by five senses, its danger is exaggerated than the actual. Radiation can be made intentionally, but also stays in the nature at all times just like other energy flow.

## Shielding methods

See the following graph for references. Select the ideal tickness and quality of shielding material.



No.	Shield Material	Thickness [mm]
①	SUS	Over 0.2
②	Aluminium	Over 0.25
③	Glass	Over 0.5
④	PVC	Over 0.6
⑤	Acrylic	Over 5.0

### Warning

- \* Please shield the area where the customer is willing to install the soft X-ray device for safety issue.
- \* After shielding process, please connection to your own interlock system to operate the X-ray device On/Off when the door is opened/closed.