

# Soft X-ray Ionizer

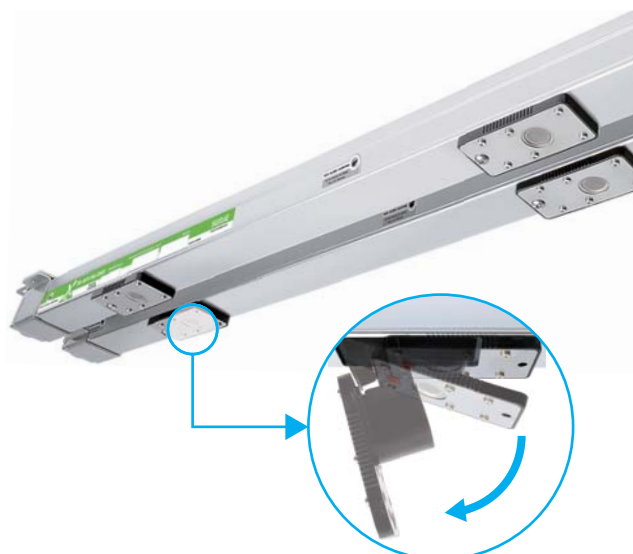
## Electrostatic Total Solution

### SXB-05NRD

If any problem happens from main tube, sub tube will start to work automatically so that this makes no pause on production line. 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

- If one of the tubes has an error, the other tube automatically starts to run
- 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



Rotate type replaceable tube



SXC-10BT (Controller)

### Specifications

- Ionizer (SXB-05NRD)

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. 130W
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

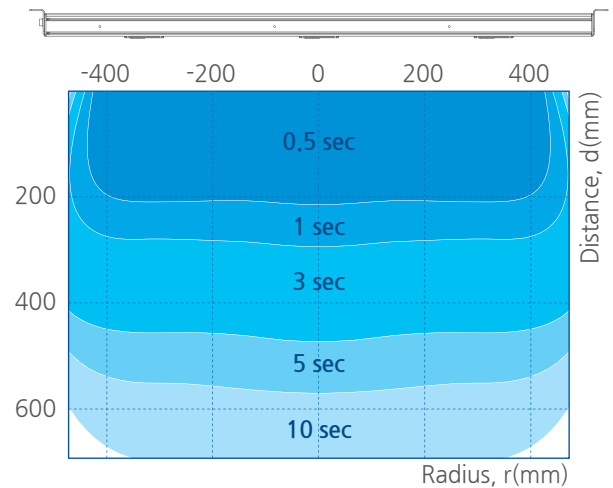
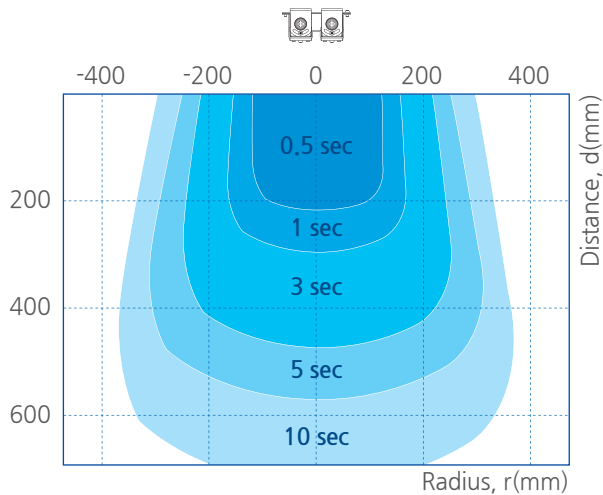
※ The appearance and specification of the product may be changed without prior notice for the improvement of the product.

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## Electrostatic Total Solution

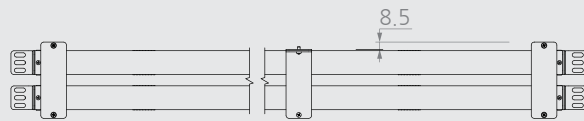
### Decay Time Characteristics

- Model : SXB-05NRD-900-6
- Charge Plate Capacitance : 20pF (150 X 150mm)
- Decay Time :  $\pm 1,000V$  to  $\pm 100V$
- Temperature & Humidity : 24°C, 50%RH

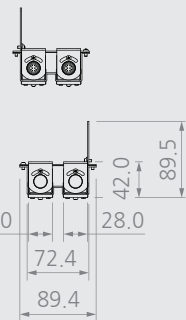


### Dimensions

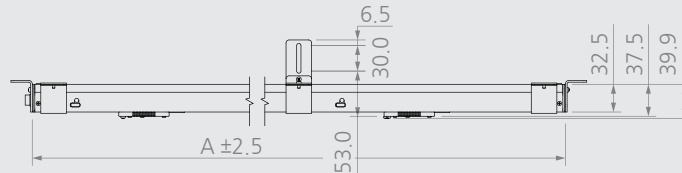
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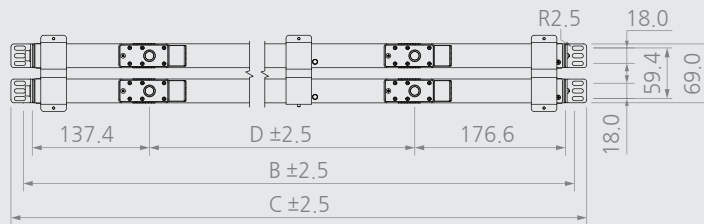
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No.	Model No.	A	B	C	D	Tube q'ty
1	SXB-05NRD-300-2	314	335	391	-	2
2	SXB-05NRD-600-4	625	646	675		4
3	SXB-05NRD-900-6	936	957	986	311	6
4	SXB-05NRD-1200-8	1247	1268	1297		8
5	SXB-05NRD-1500-8	1558	1579	1608	414.6	8
6	SXB-05NRD-1500-10	1558	1579	1608	311	10
7	SXB-05NRD-1800-10	1869	1890	1919	388.8	10

No.	Model No.	A	B	C	D	Tube q'ty
8	SXB-05NRD-1800-12	1869	1890	1919	311	12
9	SXB-05NRD-2200-12	2180	2201	2230	373.2	12
10	SXB-05NRD-2200-14	2180	2201	2230	311	14
11	SXB-05NRD-2500-14	2491	2512	2541	362.8	14
12	SXB-05NRD-2500-16	2491	2512	2541	311	16
13	SXB-05NRD-2800-14	2802	2823	2852	414.6	14
14	SXB-05NRD-2800-18	2802	2823	2852	311	18

# Radiation Shielding methods

## Electrostatic Total Solution

### What are soft X-rays?

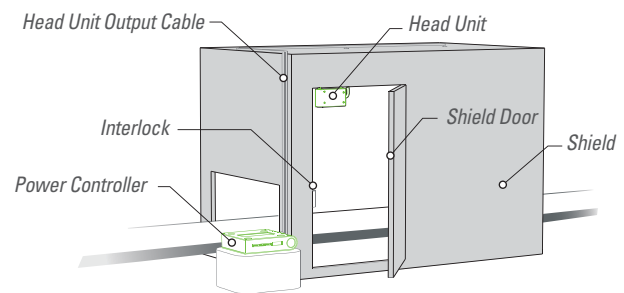
X-ray can be sorted according to its penetrating power, and an X-ray which has weaker penetrating power that can be absorbed easily in thin layer of the air is called the soft X-ray.

#### Benefits of Soft X-ray Ionizer

- Perfect Ion Balance ( $\pm 0V$ )
- No CDA (Clean Dry Air) required
- No dust generation
- No ozone ( $O_3$ ) generation
- High ion generation density
- Static electricity can be removed even under inert gas conditions such as  $N_2$  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.



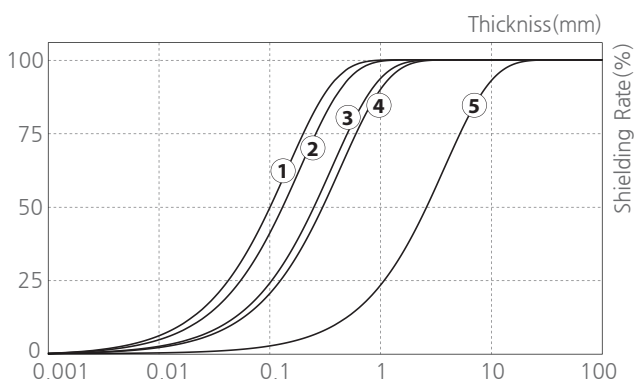
#### Radiation

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.