# Soft X-ray Ionizer

# **SXB-05NRL Series**



## **Key Features**

- Efficiently designed for application in various spaces and constrained(obstructed) spaces.
- Ion Balance ±0V
- Maintains initial performance throughout lifespan.
- No need for Clean Dry Air (CDA); no particle scattering.
- Supports up to 12 tubes for wide-range static elimination.
- Easy separation and quick on-site replacement with tube module structure.
- Economical maintenance with separate tube purchases.

# **Specifications**

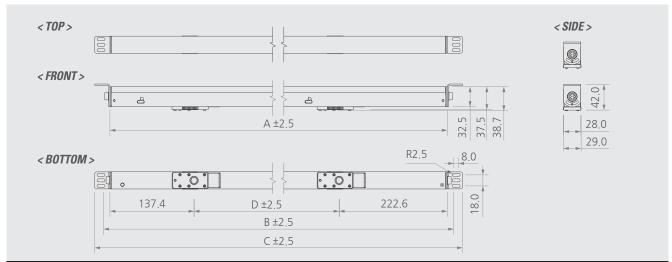
| Parameter              | Description / Value             |
|------------------------|---------------------------------|
| Ion Generation Method  | Soft X-ray                      |
| Source                 | Soft X-ray Tube                 |
| Tube Voltage           | 4.9kV                           |
| Beam Angle             | 150°                            |
| Power Consumption      | Max. 130W                       |
| Operation Circumstance | 0℃~+50℃(32°F~122°F), 35%~85% RH |
| Warranty               | 1 year                          |

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





#### **Dimensions**

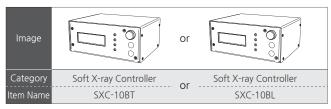


| No. | Model No.        | Tube Q'ty | Α    | В    | С    | D     | Mid. BRKT Q'ty |
|-----|------------------|-----------|------|------|------|-------|----------------|
| 1   | SXB-05NRL-300-1  | 1         | 360  | 381  | 410  | -     | -              |
| 2   | SXB-05NRL-600-2  | 2         | 671  | 692  | 721  | 311   |                |
| 3   | SXB-05NRL-900-3  | 3         | 982  | 1003 | 1032 | 311   |                |
| 4   | SXB-05NRL-1200-4 | 4         | 1293 | 1314 | 1343 | 311   |                |
| 5   | SXB-05NRL-1500-4 | 4         | 1604 | 1625 | 1654 | 414.6 | 2              |
| 6   | SXB-05NRL-1500-5 | 5         | 1604 | 1625 | 1654 | 311   |                |
| 7   | SXB-05NRL-1800-5 | 5         | 1915 | 1936 | 1965 | 388.8 |                |
| 8   | SXB-05NRL-1800-6 | 6         | 1915 | 1936 | 1965 | 311   |                |
| 9   | SXB-05NRL-2200-6 | 6         | 2226 | 2247 | 2276 | 373.2 |                |
| 10  | SXB-05NRL-2200-7 | 7         | 2226 | 2247 | 2276 | 311   |                |
| 11  | SXB-05NRL-2500-7 | 7         | 2537 | 2558 | 2587 | 362.8 | 3              |
| 12  | SXB-05NRL-2500-8 | 8         | 2537 | 2558 | 2587 | 311   |                |
| 13  | SXB-05NRL-2800-7 | 7         | 2848 | 2869 | 2898 | 414.6 |                |

# **Product compositions**



# **Connection Controller**



### **Options**

| lmage     | 6.00        |                | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |                  |
|-----------|-------------|----------------|---------------------------------------|------------------|
| Category  | Tube Module | Middle Bracket | Boost Module                          | Output Cable(1m) |
| Item Name | SXB-05N-T   | SBR-XB-1-001   | SXB-BM                                | SOC-BM-1-001     |

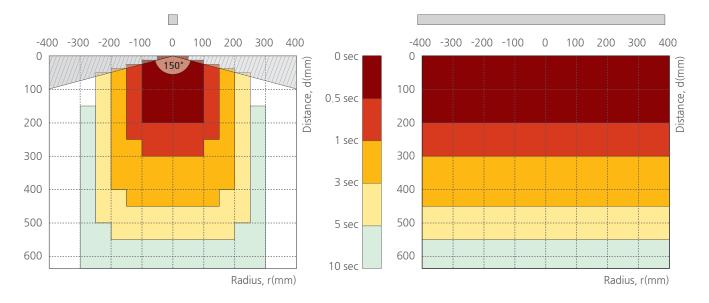
### **Decay Time Characteristics**

► SXB-05NR / SXB-05NRL / SXB-05NRD

• Decay Time: ±1,000V to ±100V

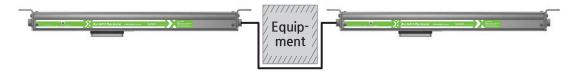
• Temperature & Humidity: 24°C, 50%RH

• Charge Plate Capacitance: 20pF (150 X 150mm)

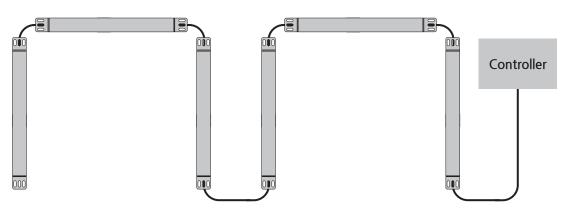


# **Application**

· When multiple ionizers are required



• If there are obstacles in the installation site



#### 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.

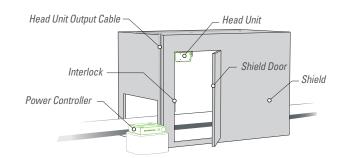
#### Benefits of Soft X-ray Ionizer

- Perfect Ion Balance (±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 1µSv/hr or under, So keep your area under the mentioned level all the time. (The leakage level of radiation dose might differ in countires)
- \* Please refer to the below chart for possible materials of shielding and its acceptable thickness.



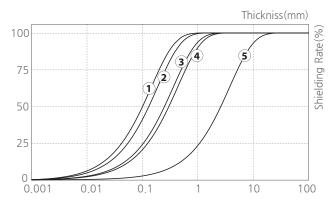
#### Radiation

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       |  |

#### ♠ Warring

- \* 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.



