

# Soft X-ray Ionizer

## Electrostatic Total Solution

### SXN-10UL

Since this device never creates dust, particle, electromagnetic, and ozone creation, the soft x-ray ionization does not require any air consumption.

The head unit is compatible with a competitor's control unit and no special maintenance is required.

### Key Features

- The head unit can be installed with the competitor's controller
- No particle or dust, hence, no specific maintenance is required
- No compressed air nor nitrogen are necessary
- No O<sub>3</sub>(Ozone)
- Static elimination can be performed in the area where it is in non-active gas(i.e. N<sub>2</sub>, Ar) zone
- Real time monitoring is applicable via RMS(Real time Monitoring System) which is optional Patent



### Specifications

Parameter	Description / Value
Ion Generation Method	Soft X-ray
Source	Soft X-ray Tube
Tube Voltage	11kV
Beam Angle	150°
Power Consumption	Max. 8W (DC 24V)
Operation Circumstance	0°C ~ +50°C(32°F ~ 122°F), 35% ~ 85% RH
Cooling Method	Natural Air Cooling
Mounting Method	Bolt Mounting with Bracket
Weight	0.36Kg
Alarm	Head Fail
Warning	Life Time Over
Warranty	1 Year

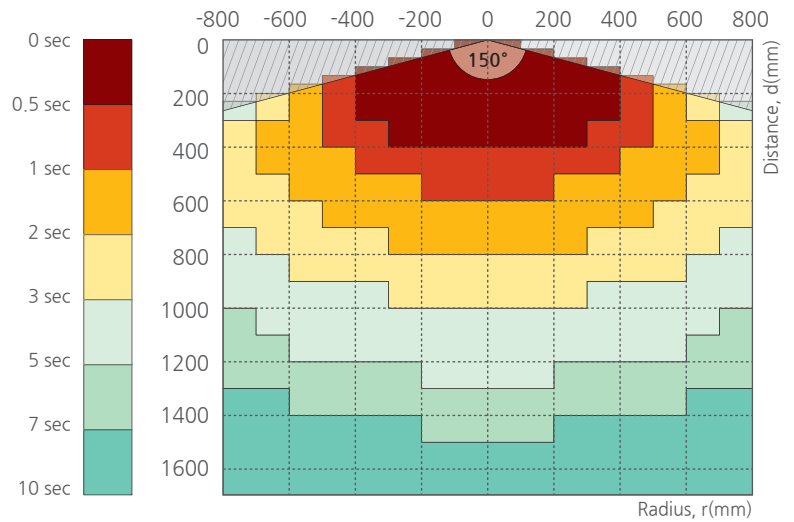
\* The appearance and specification of the product may be changed without prior notice for the improvement of the product.

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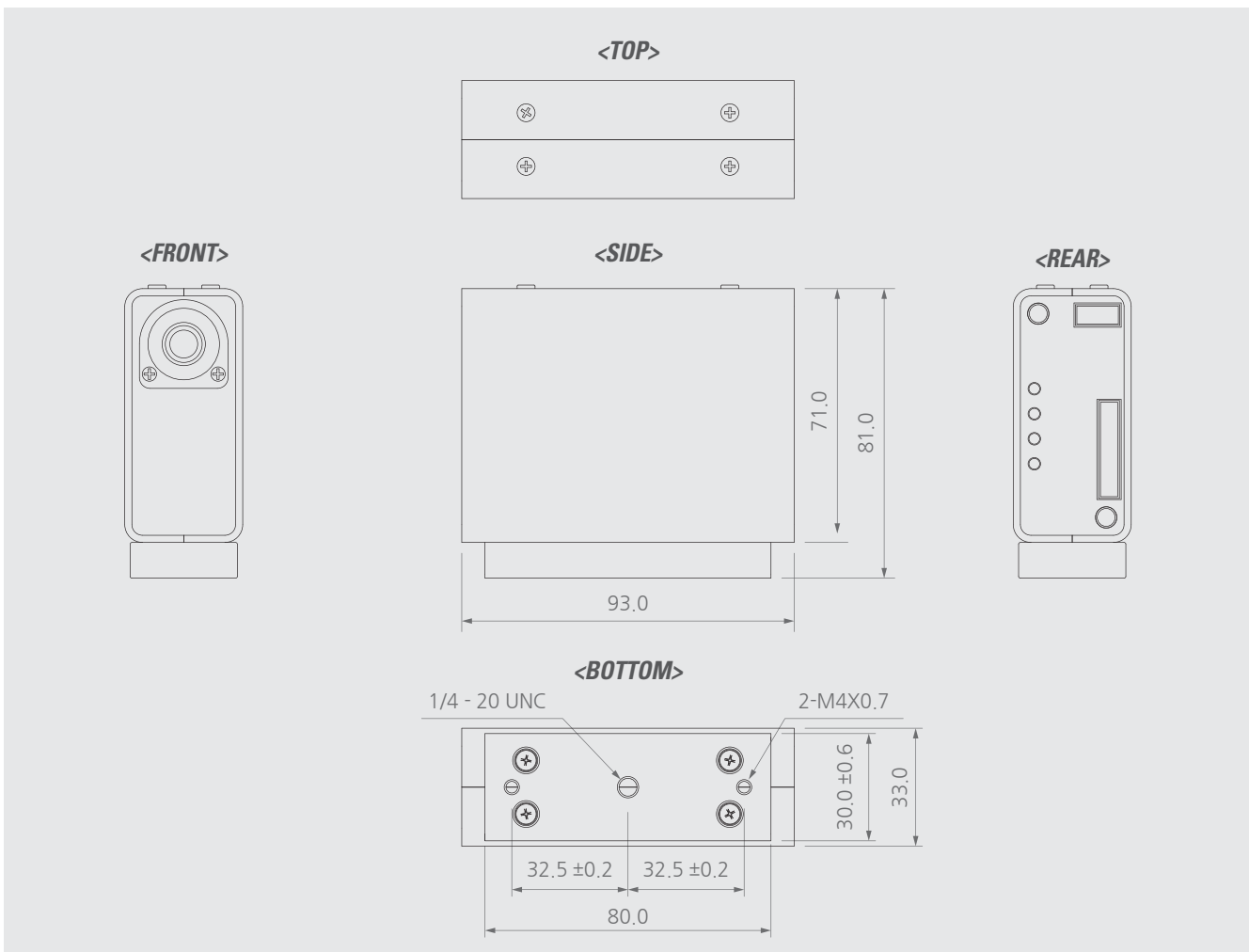
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## Decay Time Characteristics

- Model : SXN-10UL
- Decay Time :  $\pm 1,000V$  to  $\pm 100V$
- Charge Plate Capacitance : 20pF(150 X 150 mm)
- Temperature & Humidity : 24°C, 50%RH



## Dimensions



# Radiation Shielding methods

# Electrostatic Total Solution

## What are soft X-rays?

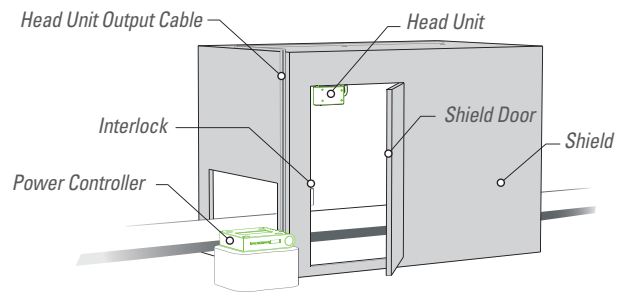
X-ray can be sorted according to its penetrating power, and an X-ray which has weaker penetrating power that can be absorbed easily in thin layer of the air is called the soft X-ray.

### Benefits of Soft X-ray ionizer

- Perfect Ion Balance ( $\pm 0V$ )
- No CDA (Clean Dry Air) required
- No dust generation
- No ozone (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.



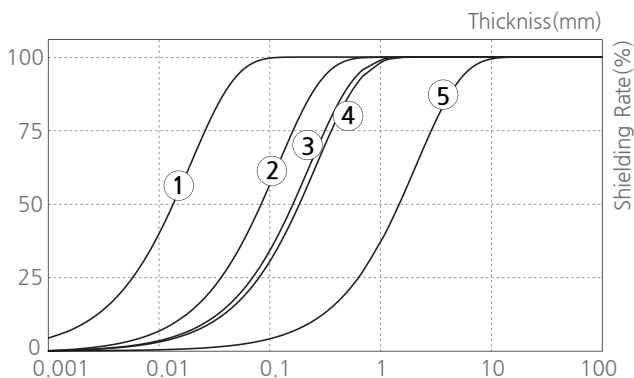
### Radiation

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 0.3
②	Aluminium	Over 2.0
③	Glass	Over 4.0
④	PVC	Over 4.5
⑤	Acrylic	Over 40.0

### 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.