

# Soft X-ray Ionizer

## Electrostatic Total Solution

### SXH-15N(450)

Suitable Ionizer for super clean process as there is no dust, electromagnetic wave, ozone. With 15kV application, it is effective for wide area and long distance and has better performance than our company's 15kV products.

### Key Features

- 15kV application, it is effective for wide area and long distance
- Better performance than our company's 15kV products
- Serial Number of the ionizer is displayed on controller
- When the communication status between ionizer and controller is not normal, it stops automatically
- Individual control for 4 ionizers to turn on/off using RS-485 communication protocol



• Head [Standard : SXH-15N(450)]



• Head [Option : SXH-15N(450A)]



• Controller [SXC-104N(450)]

### Specifications

#### • Ionizer [SXH-15N(450)]

Parameter	Description / Value
Ion Generation Method	Soft X-ray
Source	Soft X-ray Tube
Tube Voltage	14.9kV
Beam Angle	150°
Power Consumption (With Cont.)	Max. 15W (Based on Head 1)
Operation Circumstance	0℃ ~ +50℃(32°F ~ 122°F), 35% ~ 85% RH
Weight	Standard: 0.46kg / Option : 0.48kg
Warranty	1 year

#### • Controller [SXC-104N(450)]

Parameter	Description / Value
Input Power	AC 100~240V, 50/60Hz
Power Consumption (with Head)	Max. 90W (Based on 1:4)
Controller Fuse	250V, 3A, 5X20 Glass Type Fuse
Operation Circumstance	0℃ ~ +50℃(32°F ~ 122°F), 35% ~ 85% RH
Weight	0.77kg
Alarm Function	Head Fail, Head Communication Error
Interface	(Run, Alarm, Power, Over Time, Remote, Interlock) Remote On/Off, Interlock On/Off, Output State
Warranty	1 year

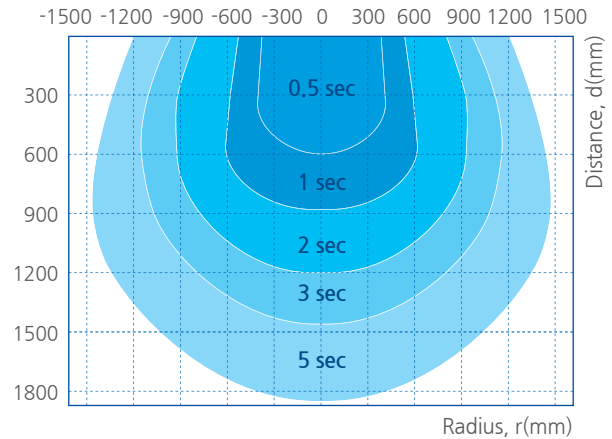
※ The appearance and specification of the product may be changed without prior notice for the improvement of the product.

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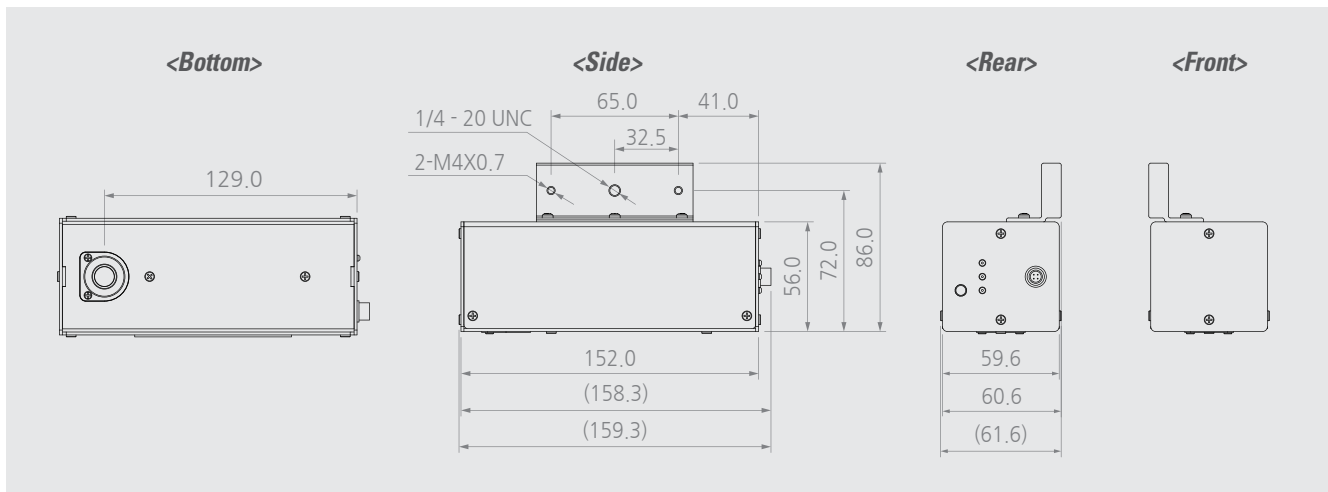
### Performance

- Decay Time :  $\pm 1,000V$  to  $\pm 100V$
- Charge Plate Capacitance : 20pF (150 X 150mm)
- Temperature & Humidity : 20°C, 32%RH
- Model : SXH-15N(450)

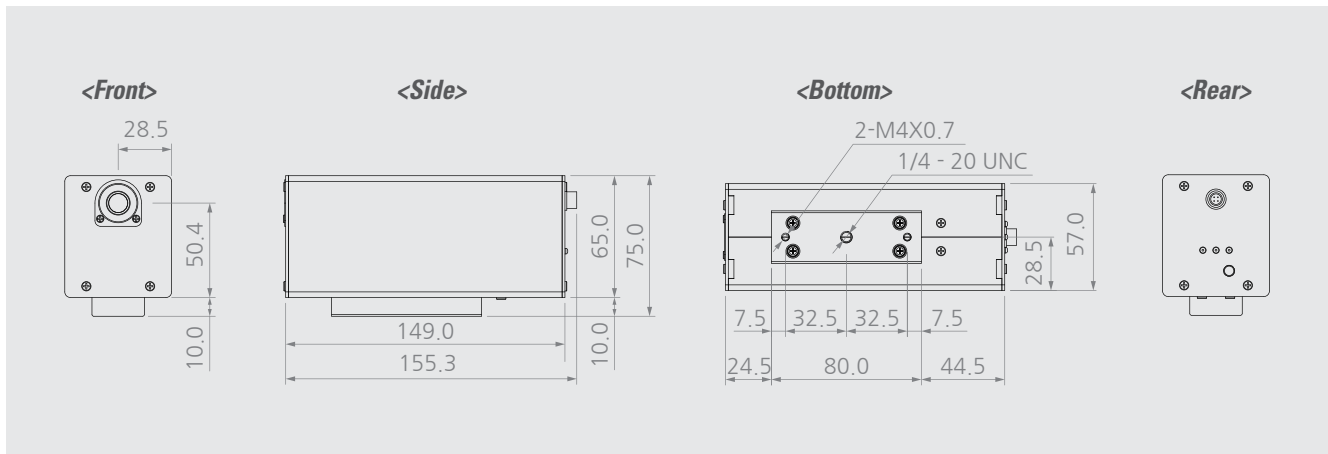


### Dimensions

#### ► SXH-15N(450)



#### ► SXH-15N(450A) \_Option



# Radiation Shielding methods

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### What are soft X-rays?

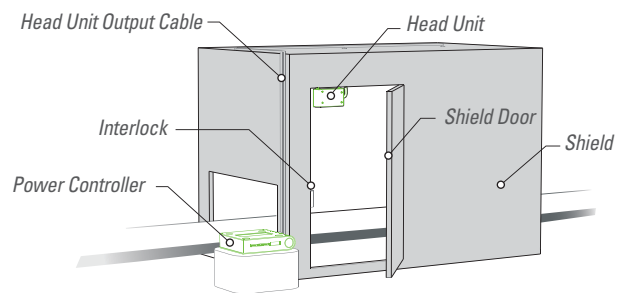
X-ray can be sorted according to its penetrating power, and an X-ray which has weaker penetrating power that can be absorbed easily in thin layer of the air is called the soft X-ray.

#### Benefits of Soft X-ray Ionizer

- Perfect Ion Balance ( $\pm 0V$ )
- No CDA (Clean Dry Air) required
- No dust generation
- No ozone ( $O_3$ ) 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  $10\mu Sv/hr$  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.



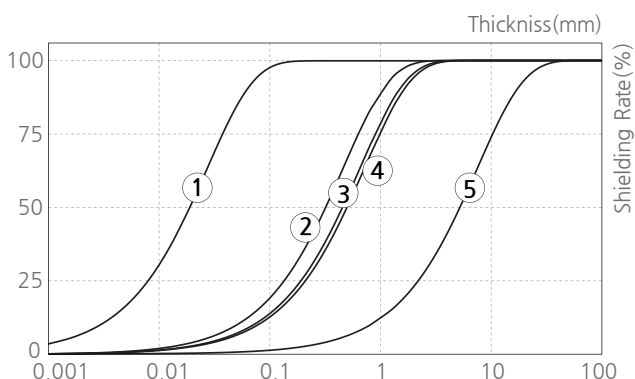
#### Radiation

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 0.4
②	Aluminium	Over 7.0
③	Glass	Over 10.0
④	PVC	Over 11.0
⑤	Acrylic	Over 120.0

#### ⚠ 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.