

## Soft X-ray Ionizer

## Electrostatic Total Solution

# SXH-05T / 10T

Suitable Ionizer for super clean process as there is no dust, electromagnetic wave, ozone. Slim size is useful to be installed in narrow, small space. Communication with RS-485, the information of the accumulated head usage time can be managed through PC.

### Key Features

- Communication with RS-485, the information of the accumulated head usage time can be managed through PC
- Slim size is useful to be installed in narrow, small space
- Applicable for ESD sensitive production line or semiconductor assembly (SXN-05T)
- Able to remove electrostatic from tiny, adjacent object. (SXN-05T)
- With RMS(Real Monitoring System), possible to check operation status in real time (Option) Patent



SXH-05T



SXH-10T

### Specifications

Parameter		Description / Value
Ion Generation Method		Soft X-ray
Source		Soft X-ray Tube
Tube Voltage	SXH-05T	4.9kV
	SXH-10T	11kV
Beam Angle		150°
Power Consumption		Max. 10W (Based on 1 Head)
Operation Circumstance		0℃ ~ +50℃(32°F ~ 122°F), 35% ~ 85% RH
Weight		0.29kg
Warranty		1 year

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

### Connectable Controller & Functions

Function	Controller		
	SXC-104N	SXC-104S	SXC-104T
Product Monitoring (RS-485)	O	O	O
Resetting usage time after head replacement	O	O	X
Stop when communication is not possible. (Function for Safety)	O	X	X
Checking the individual head position	O	X	X
Controlling the individual head	O	X	X
Number of Heads can be connected	1 ~ 4	1 ~ 4	1 ~ 4

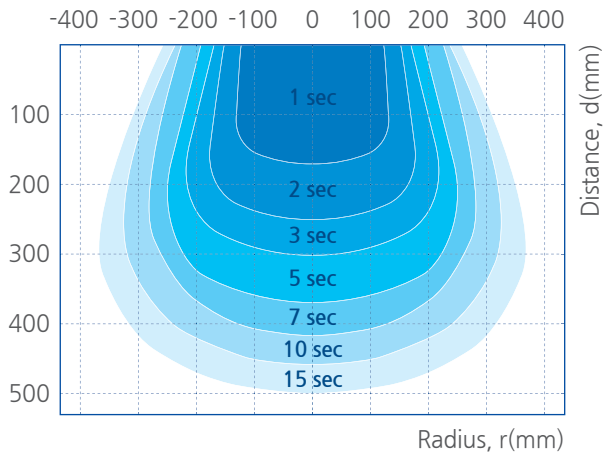
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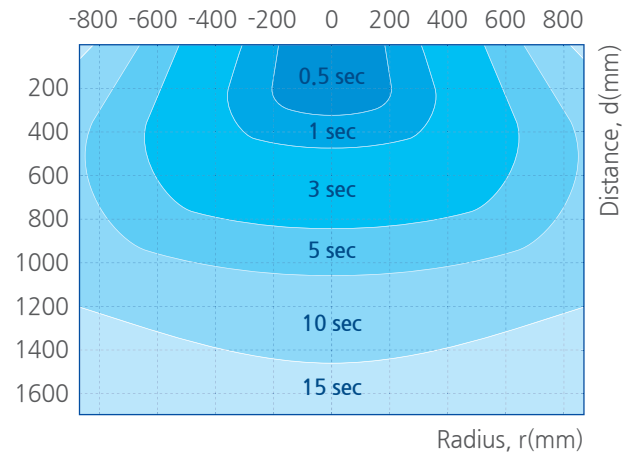
### Performance

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

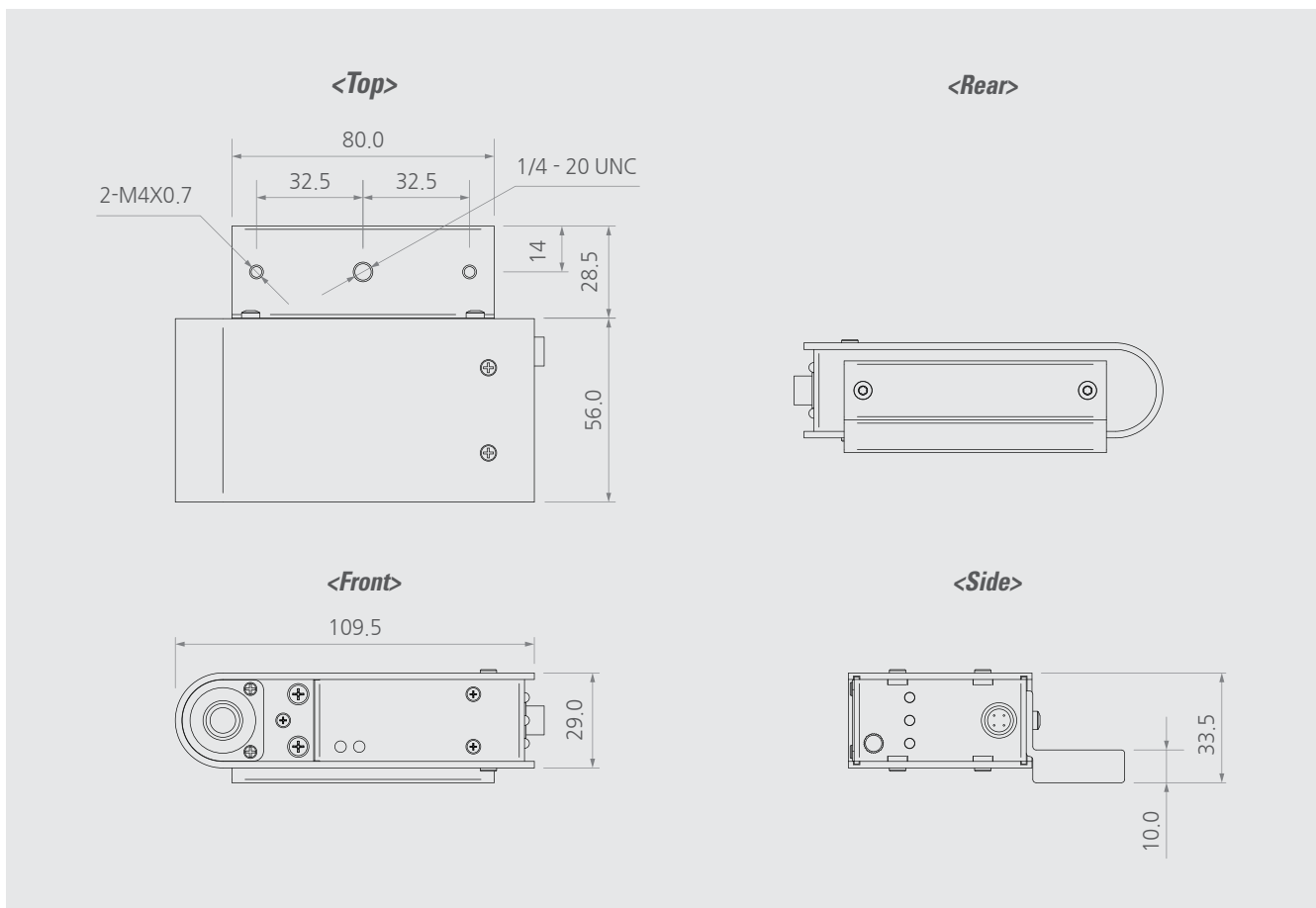
Model : SXH-05T



Model : SXH-10T



### Dimensions



# Radiation Shielding methods

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### What are soft X-rays?

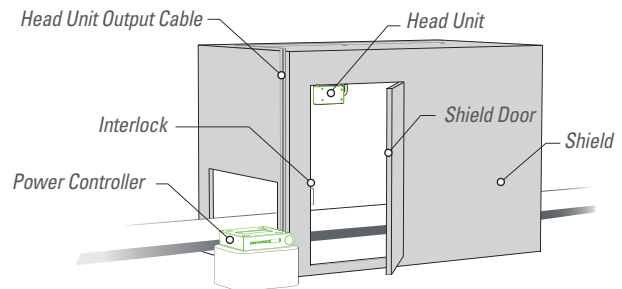
X-ray can be sorted according to its penetrating power, and an X-ray which has weaker penetrating power that can be absorbed easily in thin layer of the air is called the soft X-ray.

#### 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  $1\mu Sv/hr$ (SXH-05T),  $10\mu Sv/hr$ (SXH-10T) 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

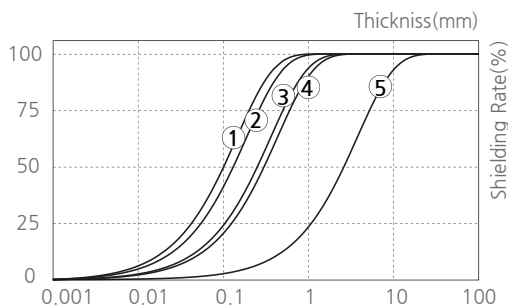
With radiation You can ionize some substance, Energy flow that radiated substance generates.

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

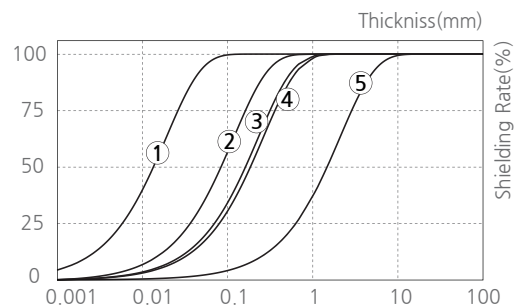
See the following graph for references. Select the ideal tickness and quality of shielding material.

SXH-05T



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

SXH-10T



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.