

Best new corona virus infection prevention !

Always sterilize the space among people

Facion

Double effect "Ion Plasmastar" & "Low concentration ozone"

*The ozone effect itself is easily affected by humidity and it effectively inactivates the virus when used in combination with a strong ion cluster.



Actual delivery over 20,000-units for 8 years
to medical/nursing facilities, nursery schools, sport gyms, hotels, restaurants, etc
It has been installed to Kyushu university and the neonatal rooms of Kurume university

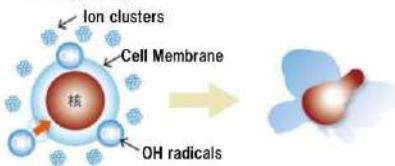
Commercial virus inactivating device

For product prices/5-year lease fee and quotations, please contact the distributor.
(See contact information below)

Test results of sterilization effect and safety

Sterilization mechanism

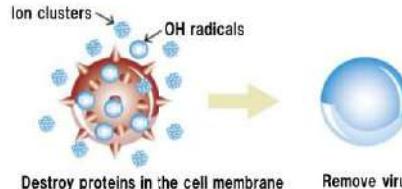
Ion clusters take in the floating bacteria.
OH radicals are generated and destroy the cell membrane of the fungus.
Finally fungus are inactivated.
Resistant bacteria will not be made without adding drug.



Destroy the cell membrane

Virus removal mechanism

Ion clusters take in the floating virus.
OH radicals are generated and destroy protein on the cell membrane surface of the virus.
Finally virus are eliminated.



Destroy proteins in the cell membrane

Ions that always stay in the room eliminate the space and adherent bacteria.



Even in a space where people cannot keep a distance, ions continue to stay and inactivate viruses and bacteria.

A large number of ions and low concentrations of ozone keep sterilizing the virus in the conference rooms, eating and drinking places that are difficult for ventilation.

New coronavirus	Confirmed inactivation	Concentration equivalent to the new corona inactivation test with low concentration ozone Gunma Prefectural Industrial Science Center Gunma Se No. 2312-91
Staphylococcus aureus	Confirmed inactivation	Gunma Prefectural Industrial Science Center Gunma Se No. 2312-90
Escherichia coli	Confirmed inactivation	Gunma Prefectural Industrial Science Center Gunma Se No. 2305-273
Formaldehyde	Confirmed decrease in concentration	Japan Quality Assurance Organization KL25150083
Ozone measurement	JQA aquired	Oki Engineering Co.,Ltd. 152300
EMI test	VCCI classB clear	

Effectiveness of Facion

1. The huge amount of ions (3-million/cm³ in one discharge)
150-million/cm³ per second, 18,000-million/cm³ per 120-second is released to the air.
2. Long residence time of ions
(4-6 times longer than the others, Ion effect lasts for 120 seconds)
It can be expected to be effective against viruses attached to clothes, hair, furniture, etc.
3. Decomposes and detoxifies bacteria with strong ionization energy
(2-times larger than the others, 6-12 eV)
The ionization energy of virus and odor-causing bacteria is 8 to 11.5 eV.
From this figure If the released ionization energy is weak, the bacteria cannot be decomposed and rendered harmless. Facion is effective because it generates high energy ions.
4. Effective for new corona with ozone
(safe for human body at low concentration less than national standard value 0.1ppm)
Simultaneously generates low-concentration ozone (0.05ppm) that does not affect the human body to prevent new corona infections.
"Inactivates new coronavirus even with low concentration ozone" announced by Fujita Medical University <https://www.fujitahu.ac.jp/news/j93sdv000007394.html>

Difference in plasma ion generation tube structure

Plasma ion discharge with wire



Plasma ion discharge at grid-like

surface intersections (Patent by Facion)



[Facion ion generation mechanism]

1. Ion cluster generator discharge 50-60 times per second.
2. 3-million pcs/cm³ of plasma ions discharge one time and forms an ion cluster.
3. 150-million pcs/cm³ ion clusters are generated and released.
Discharge 50-times per second
3-million pcs/cm³ second
4. Residence time of Ion cluster (Lifetime) is 120 seconds.
Ion cluster disappears naturally and then return to the normal air.
The amount of Ion clusters for 120-seconds is
150-million pcs/cm³ x 120-second
= 18-billion pcs/cm³
5. 2 generation pipes are built in one unit.

"Facion" explanation video site (YouTube)
<https://youtu.be/P2zgsSVf-UM>

"Facion" product specification

Dimension (mm)	W 320 x H 250 x D 120
Weight (kg)	About 2.0
Usable temperature (degree)	5~35
Usable humidity (%)	20~60
Power supply	DC12V(Designated adapter included)
Power code length (m)	About 1.8
Power consumption (W)	Max 12
Applicable floor area (m ³)	Upto 40m ³ (Recommended)
Safety device	Oversurrent prevention
※ 220V designated adapter is also available (Optional)	

[Precaution for equipment installation location]

1. It is effective to place on a high place (1.8-2.0m like shelf), since the generated ions are heavier than air.
2. Install far from the exhaust port, if there is an indoor ventilation fan.

[Manufacturer warranty period]

1-year

[Manufacturer]

Nextyle Tokyo Co.,Ltd.

4F Yanagibashi AT Building, 2-3-1, Yanagibashi, Taito-ku, Tokyo 111-0052, Japan

TEL : 03-5829-4141 FAX : 03-5829-4142

Homepage : <http://www.nextyle.tokyo/>

KYAN DENKEN CO., LTD.

2-3-5 #101 Kanagusuku, Naha, Okinawa, 901-0155

TEL: +81-98-987-4001 FAX: +81-98-987-4002

"Facion" sterilization effect

Verification method : The number of adherent bacteria on the surface of the substance was measured and verified by specialized equipment when Facion was in operation.

The specialized equipment is a device that displays the number of bacteria by the wiping method, which is used by the food and beverage industry, health authorities, etc.

Verification Place : HTB Technical Center Co.,Ltd. Located in Sasebo, Japan

【Verification 1】

Specific method : The change in the number of surface sterilization on the back of the screen of the notebook PC was measured. The distance from the Facion to the notebook PC was 1.5m that was the distance by the direct impact of ions.

Result : The number of bacteria was decreased by 93.3% after 60 minutes. The bacterial count level dropped to the recommended standard value for kitchen knives and hot pots in the food and beverage industry, after the reduction.

Elapsed time (minutes)	Start	60
Number of bacteria count (pcs)	2,984	199
Sterilization rate	-	▲93.3%

【Verification 2】

Specific method : The change in the number of surface sterilization of the indoor wall surface was measured. The area of the room was 18.4m² and the distance from the Facion to the measuring wall was 4.5m. The operation mode of the Facion was operated with medium for ion volume and air volume.

Result : The number of bacteria was decreased by 94.6% after 60 minutes. The reduced bacterial count level was below the recommended standard for kitchen chopping boards in the food and beverage industry.

Elapsed time (minutes)	Start	60
Number of bacteria count (pcs)	4,827	265
Sterilization rate	-	▲94.6%

The suppression of bacteria and viruses starts from the moment ion clusters are released.

"Facion" ion cluster conflicts approximately 1 trillion molecular-sized microparticles, viruses, bacteria and fungi per minute and then they are inactivated in an instant or in a short time, if they are viruses or bacteria.

Gasified harmful chemical substances is reduced to harmless air substances CO₂ (carbon dioxide) and H₂O (steam) by oxidative decomposition.

The ability and effect of the ion clusters emitted by Facion to improve the air quality of contaminated can be demonstrated not only in chamber tests such as those used in home appliances, but also in real space.

The fact that home appliances were effective in a short time in the chamber test and that they were effective in real space, are completely different issues. "Facion" has been tested in real space quite many times.

Comparison of specification between Facion and the others

	Company A	Facion
Ion generation amount (pcs/cm ³)	25,000 -50,000	3,000,000
Ion residual time (sec)	20-30	120
Ionization energy (eV)	Under 6	6-12
Bactericidal effect	△	○
Low-concentration ozone effect	—	○
Dust collection filter	Yes	None
Installation location	Deferred	Deferred Wall hanging
Weight (kg)	7-17	2
Power consumption (W)	33-66	Max.12
Generated element life (years) (24-hours continuous operation)	2-3	5-6
Applicable area (m ³)	Upto 38	Upto 40
Price (J.Yen)	About 150,000	299,500

【About the destruction of bacteria and viruses by ions】

The higher number (density) of plasma cluster ions, the higher probability of collision with bacteria and viruses.

In addition, the longer the space residual time, the higher the ion density and the better the sterilization effect.

Facion has enough ionization energy to overcome it, since the energy of bacteria and viruses is about 8eV.

In addition, the specific gravity of ions is 1.2 times heavier than that of air, so if you install Facion in the upper part of the room (1.8m to 2.0m), they will be effectively spread throughout the room in a short time. It is said that the virus does not inactivate for about 2 weeks in the dry winter. Regular indoor disinfection is difficult.

If you keep Facion running for 24 hours everyday, the entire room is constantly sterilized.