

Features

produce a large quantity of ions in high efficiency.
Microplasma electric discharge system

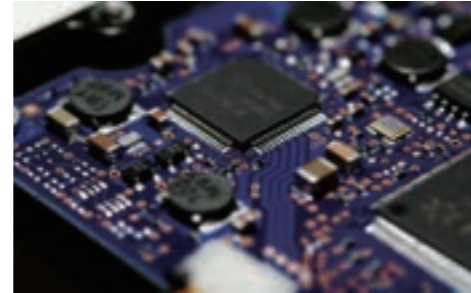
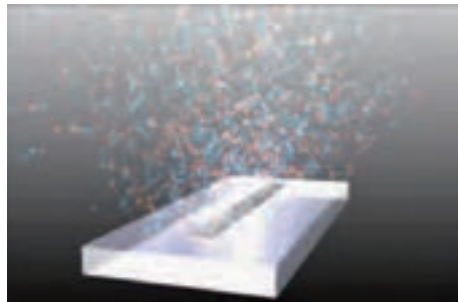
This compact electric discharge element can produce a large quantity of ions in high efficiency with little consumption electricity, and also because of built-in heater, This product possible to generate ions stably high humidity environment.

Easy to change Expendables and cleaning.
Simple maintenance design.

The blade shape electric discharge element makes maintenance work easy. The removable electric discharge element helps your regular exchange work and cleaning. When the element got dirt intensely, just wiping off the surface with ethanol.

AC adapter system
High levels of safety

The power supply is adopted an AC adapter system. Supplied electricity is converted into direct current with an adapter, the inside of machine which became high voltage is controlled in DC24V. In addition, this product completely made in Japan which has high quality and high safety.



About maintenance

**Maintenance is simple and easy,
 That must be the thing to move every day**

- When the element got dirt intensely, just wipe off the surface with ethanol
- Once in 8,000 hours, blade exchange is necessary.
 Blade exchanging is very simple and easy
 * When order or any questions, please contact our sales agency below or us.



Discharge blade
 Discharge blade should be replaced after about one year.

【Discharge blade discharge part expansion photo】



New



About 1 year later



▲ Discharge Blade



▲ It can be exchanged easily

【Selling agency】

KALMOR®

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【Agency】

KALMOR®



Levion

KALMOR oxygen cluster disinfecting and deodorizing device

Do you know really the beautiful air?

Oxygen ion cluster removes atmospheric invisible odor and viruses and makes the clean, comfortable air situation.

What is the Oxygen ion cluster ?

An oxygen ion cluster is a aggregation which attracted 10~60 oxygen molecule ions. In normally, a lot of oxygen ion cluster made in natural world when sunbeam hits the air. The Levion electrifies atmospheric oxygen molecules with an electric discharge element and creates a large quantity of oxygen cluster ions artificially from slight electricity.

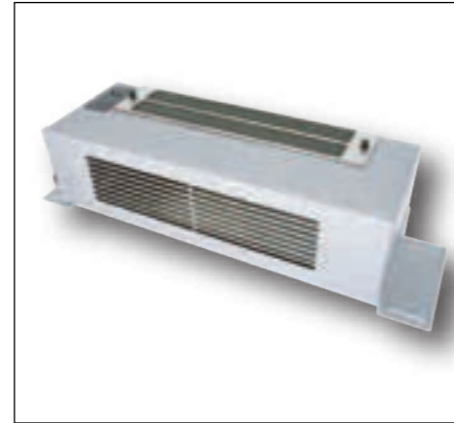
Sylphide

Interior installation type (exposure)

This model ideally use for garbage place in apartment complex. Mainly sets ceiling or surface of the wall near the air supply opening.

Because of the static sound type cross flow fan, this product can get high deodorization effect even if the aeration system which is hard to get the aeration current like a door louver.

* When this product operating, please control it by the interlocking operation with the ventilation equipment in basically.



Models	Effective capacity	Dimensions (W×H×D)	Energy Consumption	Weight
Sylphide 1	110m ³	450×140×145	27W	4.5kg
Sylphide 2	220m ³	450×140×145	40W	5.0kg



Sylphide mini

Interior installation type (exposure/ceiling built-in)

The model who covers the middle capacity area of Sylphide and Piccolo.

Because the noise is quiet, you can use in the room.

It can also be used as the ceiling built-in type by using option component.

Therefore it's possible to install without spoiling the appearance in the room.



Models	Effective capacity	Installation	Dimensions(W×H×Dmm)	Energy Consumption	Weight
Sylphide mini	60m ³	Exposure	150×150×56	6W	0.65kg
		Ceiling built-in	200×200×135	6W	0.85kg



Operating requirements

- Operating temperature : 0° to 50°C(32°to122°F)
- Life of the ion : reduce to half in approximately 40 seconds
- Control system : Interlocking operation with the ventilation equipment

- Relative humidity: Under 70%
- Power supply:100V AC (AC power cable corresponds to only 100V. When using the other voltage, it has to change the AC cable.)

Piccolo

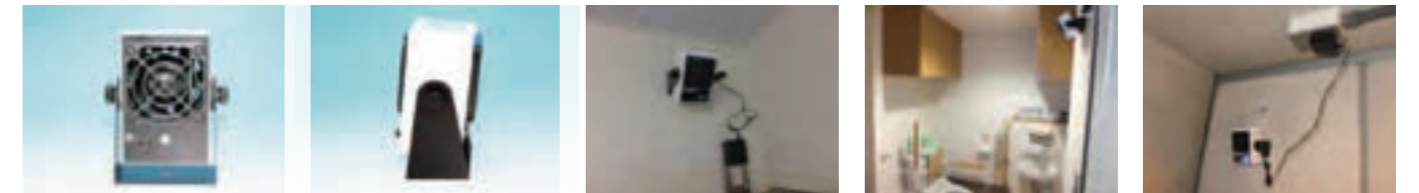
Super small type

This model ideally use for small spaces such as each floor garbage place in high rise tower apartment or elevator. This product puts a fan on the main body and generate enough quantity of ions although being small Setting is very flexible with an attached stay, it can set in any places including a ceiling and the wall surface.

* When this product operating, please control it by the interlocking operation with the ventilation equipment in basically



Models	Effective capacity	Dimensions (W×H×D)	Energy Consumption	Weight
Piccolo	60m ³	79×116×50	7.5W	0.54kg



RAITEI

Duct installation type

This device install secondary side supply air duct of AHU, and an oxygen cluster ion is supplied to an interior from interior outlet of air.

It's most suitable for use in the large-scale space used by the first kind ventilation.

It's possible to install it in the duct directly using an exclusive frame.It' s not necessary casing unit. The RAITEI has inter locking switch with AHU and the ion adjustment dial , so controller and control panel are unnecessary.



Models	Effective capacity	Dimensions (W×H×D)	Energy Consumption	Weight
Raitei 2400	2400m ³ /h	340×380×256.5	26W	4.3kg
Raitei 4800	4800m ³ /h	340×380×256.5	47W	4.7kg
Raitei 7200	7200m ³ /h	340×380×256.5	68W	5.0kg

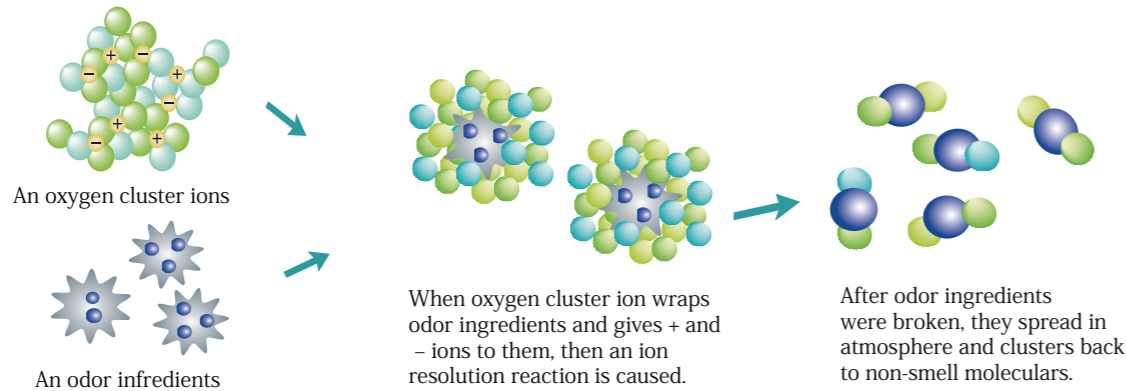


Principle

DedORIZATION

A huge oxygen cluster ion wraps small smell molecules

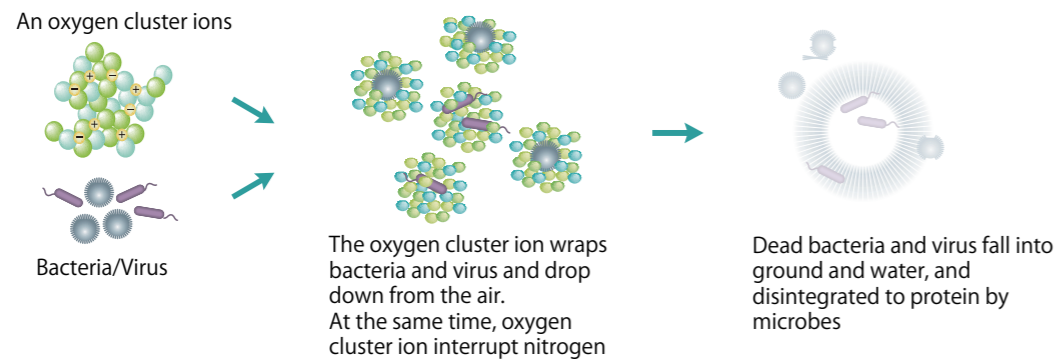
Most of the odor ingredients which can feel with human nose are very small molecules, and molecular weight is between 17 to 300. The oxygen cluster ion has about 1000~2000 molecules weight, that oxygen cluster ion can wraps odor ingredients easily and breaks them by ion resolution reaction.



Bacteria elimination

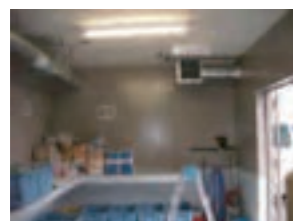
Interrupting nitrogen supply which is necessary for the growth of bacteria and the virus.

The oxygen cluster ion shows a high sanitization effect for bacteria and a virus floating in the air. The oxygen cluster ion wraps bacteria and viruses and interrupt nitrogen supply. If there is no nitrogen, they can't grow and die. This is how the oxygen cluster ion kills bacteria and virus.



Ideal for

The dedorization and sanitization by the oxygen cluster, show an effect at various places. Levion dedorize various indoor places that is a source of odor such as garbage place or wastewater treatment facility. By the air condition of indoor place is kept clean and good condition, exhaust measures will become needless. This is the big characteristic of Levion.



Garbage room



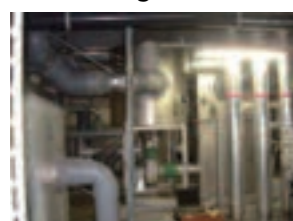
Office



Rest room



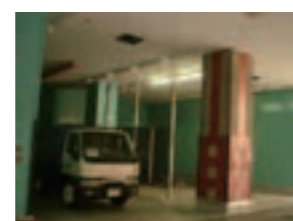
experimental animal facility



wastewater treatment facility



Elevator

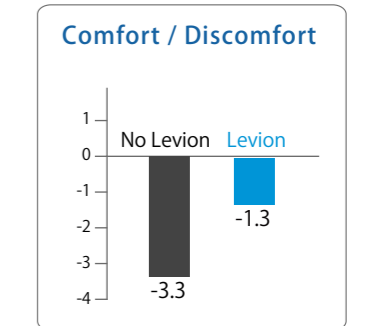
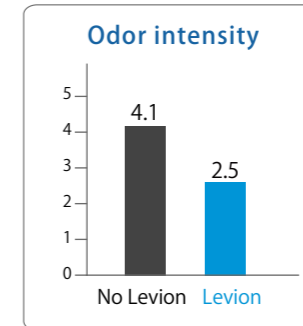
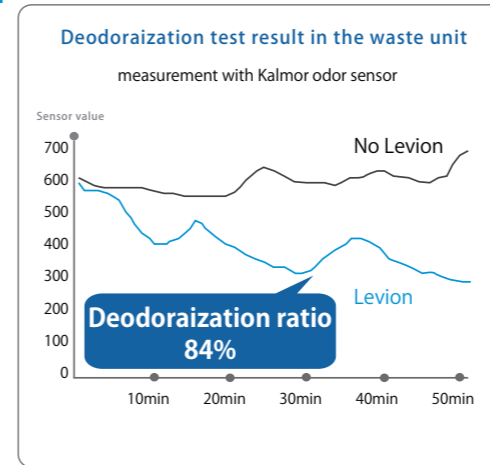


Disposal plant



Shopping mall

Deodorizing effect

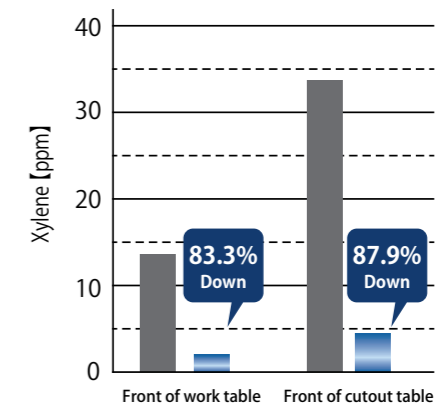
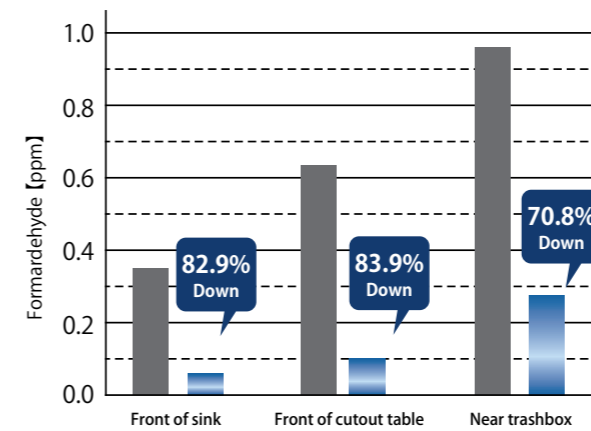


* 6 phases of odor intensity
0: Non smell
1: Very weak, possible to smell
2: Weak smell that understanding what's smell
3: Smell easily
4: Strong smell
5: Smell intense

* 9 phases of comfort / discomfort smell index
-4: Too Discomfort / 4: Too comfort
-3: Very Discomfort / 3: Very comfort
-2: Discomfort / 2: Comfort
-1: Discomfort a little / 1: Comfort a little
0: Non smell

Eliminate formaldehyde effect

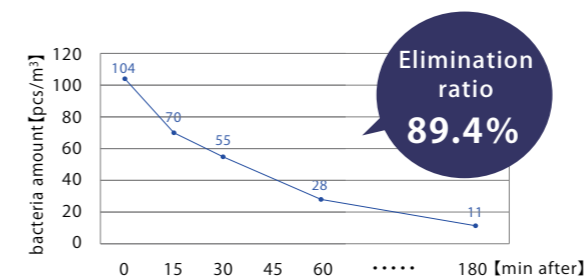
Formaldehyde & xylene dedorizing test at hospital and pathology laboratory



Bacteria elimination effect

Bacteria eliminate examination by third party

Result



Bacteria eliminate test at certain office

Result

Before install



After install

