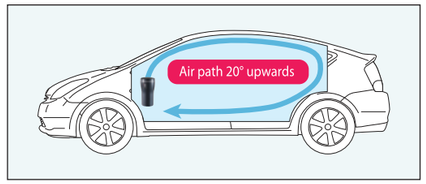
Fits into a car cup holder

With a diameter of 65 mm and a height of 150 mm, the IG-BC2 fits into a car cup holder*1.

Designed to release high-density of Plasmacluster ions that follow the car's interior airflow*2

Plasmacluster ions are released at a 20° upwards angle and are carried along the ceiling of the car to every part of the interior by the Coanda effect*3.



- Only the generating unit needs to be replaced, ensuring a long service life.
- Economical and energy efficient, even over long periods of time.

*1 Do not place in commercially sold cup holders or on uneven surfaces; the product may fall, resulting in injury or breakage.
*2 Actual numbers of ions and disinfecting/purifying effectiveness will vary according to the room conditions (product installation location, air conditioner airflow volume, room size, shape, fresh air ventilation ON/OFF, etc.) and the IG-BC2 operation method.
*3 Coanda effect: When a jet of air or water (for example) is discharged, it tends to travel along a nearby curved surface for a considerable distance, even to the point of bending around corners.

Specifications

Model	IGBC2EB BLACK	IGBC2EP PINK	IGBC2EW WHITE
Power source*1	Car power adapter (12 V DC, negative ground only)		
Applicable interior volume*2	Approx. 3.6m³ (equivalent to a vehicle interior space measuring 1.5 (W) x 2.4 (D) x 1.0 (H) meters)		
Operation modes	Plasmacluster ion airstream HIGH	Plasmacluster ion airstream LOW	
Power consumption (W)	2.3	1.3	
Operating noise level (dB)	36	28	
Outer dimensions (mm)	Cylindrical shape; top diameter: 80, bottom diameter: 65, height: 150		
Weight (kg)	Approx. 0.34 (without car power adapter)		
Accessory	Car adapter		
Power cord*3	Approx. 1.5		

This product is compatible with general passenger vehicles that use 12 V DC batteries.
It cannot be used in vehicles that use 24 V DC batteries (buses, trucks, etc.).

*1 The IG-BC2 comes with the car power adapter as an accessory.
*2 For the IG-BC2, applicable interior volume is a measure of the volume in which Plasmacluster ion density of 25,000 ions/cm³ emitted into the air can be measured at a point at a height of about 0.5 meters above the floor near the center of the space when this product is placed in a location assumed to be the cup holder beside the driver's seat and operated at the HIGH airstream setting.
*3 The power cord on the accessory car power adapter must be used.

■ Car power adapter

■ Plasmacluster ion generating unit for replacement

Model used with	IG-BC2
Product name	Plasmacluster ion generating unit for replacement
Model name	IZ-CBC2
Description	Plasmacluster ion generating unit (1 unit)

■ Replace the Plasmacluster ion generating unit

- To ensure steady emission of high-density Plasmacluster ions, the Plasmacluster ion generating unit mounted in IG-BC2 will need to be replaced periodically
- Replacement is required approximately every 17,500 hours, which is roughly equivalent to 6 years when operated for 8 hours a day. IG-BC2 will stop operating after about 19,000 hours (about 6 years and 6 months when operated for 8 hours a day) if the Plasmacluster ion generating unit is not replaced.
- The Plasmacluster ion generating unit may need to be replaced sooner when used in some environments or locations (such as near oil components, dusty or humid locations, or locations where sprays or chemicals are used).

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www.sharp.com.my / www.sharp-pci.com

Authorized Dealers :

SHARP

Plasmacluster Ion Generator

IG-BC2

Plasmacluster ion
High-Density 25000*

Elevating your driving senses

Sales of Products Equipped with Sharp's Plasmacluster Technology Have Reached
30 Million* Units
Worldwide

THE BRAND LAUREATE
THE WORLD'S BEST BRANDS 2010-2011 IN THE ASIA PACIFIC
BEST BRANDS IN HEALTHCARE

Eliminates cigarette odors and other allergens – making driving sheer pleasure

www.sharp-pci.com

- To ensure steady emission of high-density Plasmacluster ions, the Plasmacluster ion generating unit mounted in IG-BC2 will need to be replaced periodically*.

* Replacement is required approximately every 17,500 hours, which is roughly equivalent to 6 years when operated for 8 hours a day. IG-BC2 will stop operating after about 19,000 hours (about 6 years and 6 months when operated for 8 hours a day) if the Plasmacluster ion generating unit is not replaced.
* The number in this technology mark indicates an appropriate number of ions supplied into air of 1 cm³, which is measured around the center of a room with the applicable floor area (at 1.2 m height above the floor) at the maximum wind volume, when plasmacluster ion evolving equipment using the high-density plasmacluster ion evolving unit is placed close to a wall.

Technology for health

Plasmacluster ions—only from Sharp

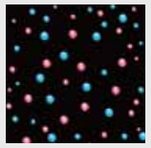
Plasma discharge generates and emits the same positive and negative ions that occur in nature. Plasmacluster technology is Sharp's original air disinfecting technology for suppressing the effects of viruses and for breaking down and removing airborne mold.

Winner of the Invention Prize at the 2008 National Invention Awards Ceremony held by the Japan Institute of Invention and Innovation (JIII)
Patented by Sharp (patent No. 3680121)

2008年度 (社)発明協会 全国発明表彰 発明賞 受賞

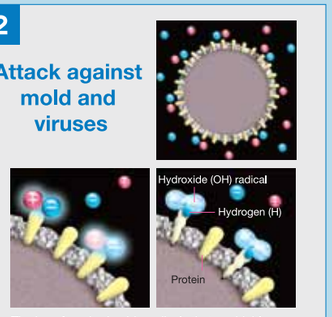
How Plasmacluster ions remove airborne mold and viruses

1 Plasmacluster ion release



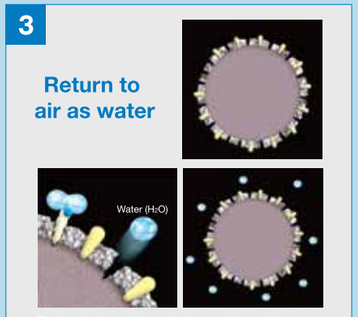
Plasmacluster ions are the same positive and negative ions found in nature. The ions are surrounded by water molecules and released into the air.

2 Attack against mold and viruses



The ions form hydroxide radicals that are highly oxidizing only when they adhere to the surfaces of mold and viruses. They instantly remove the hydrogen from the surface proteins, breaking them down.

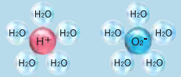
3 Return to air as water



The hydroxide (OH) radicals combine with hydrogen (H) to form water (H2O), which returns to the air.

Long-lasting Plasmacluster ions

When a plasma discharge reacts with water molecules and oxygen in the air, large amounts of positive and negative ions are generated. Since the positive and negative ions are surrounded by water molecules, they can survive for extended periods of time.



Plasmacluster ions are safe: they're the same positive and negative ions found in nature

Sharp knows how Plasmacluster ions work. And since they're the same positive and negative ions thatexist in nature, we also know that they're safe.

① Naturally occurring ions

Plasmacluster ions are the same ions that are found in nature.

② How Plasmacluster ions work

(Professor Gerhard Artmann, Aachen University of Applied Sciences, Germany)

It has been shown that Plasmacluster ions react with the protein on the surface of airborne microbe and viruses yet do not affect the internal cells.

The higher the Plasmacluster density, the greater the effectiveness

Because the ions have been proven safe, they can be used in high densities around people. And in high densities, Plasmacluster ions show even greater effectiveness*.

* Proven for airborne viruses, allergens, adhering mold, and adhering odors.

③ Proven safe

GLP*-compliant test facilities have compiled highly reliable safety data on Plasmacluster technology.

Purpose	Test	Ion densities
To test for skin irritation	Skin irritation/corrosion test	Approx. 1,000,000/cm³
To test for eye irritation	Eye irritation/corrosion test	Approx. 13,000,000/cm³
To test for gene toxicity	Inhalation toxicity test (lung tissue genetic impact assessment)	Approx. 7,000,000/cm³

Tested by: Mitsubishi Chemical Safety Institute, Japan

* GLP (Good Laboratory Practice) is a system of management controls for test facilities and test procedures. GLP was designed to ensure the reliability of chemical safety assessment tests.

Plasmacluster Technology Proven Worldwide

The institutions below have compiled validation data and records of product use for Plasmacluster ion generating devices manufactured between October 2000 and July 2009.

Test substance	Tested by
Airborne viruses	Kitasato Research Center of Environmental Sciences (Japan)
	Seoul University (Korea)
	Shanghai Municipal Center for Disease Control and Prevention
	Kitasato University Kitasato Institute Medical Center Hospital (Japan)
	Retroscreen Virology, Ltd. (UK)
Adhering viruses	Retroscreen Virology, Ltd. (UK)
Airborne allergens	Hiroshima University Graduate School of Advanced Sciences of Matter (Japan)
	Osaka City University Medical School, Department of Biochemistry & Molecular Pathology
Airborne mold	Ishikawa Health Service Association (Japan)
	Professor Gerhard Artmann, Aachen University of Applied Sciences (Germany)

Test substance	Tested by
Airborne microbes	Ishikawa Health Service Association (Japan)
	Shanghai Municipal Center for Disease Control and Prevention
	Kitasato Research Center of Environmental Sciences (Japan)
	Kitasato University Kitasato Institute Medical Center Hospital (Japan)
	Professor Gerhard Artmann, Aachen University of Applied Sciences (Germany)
	Harvard School of Public Health (USA)
Adhering microbes	Kitasato University Kitasato Institute Medical Center Hospital (Japan)
Adhering odors	Japan Spinners Inspecting Foundation
Adhering mold	The University Lübeck (Germany)
	Japan Food Research Laboratories

* Validation test results for other test substances carried out by the same test institution at the same time have not been shown.

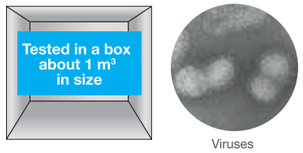
- While IG-BC2 can remove airborne viruses and other contaminants, it cannot create a completely sterile environment. Sharp does not guarantee its ability to prevent microbial infection.
- Actual numbers of ions and disinfecting/purifying effectiveness will vary according to the room conditions and the IG-BC2 operation method.

Plasmacluster High-Density 25000*

* The figure in the red box indicates the approximate number of ions per cubic centimeter released into a car's interior, as measured at a specific point, when the generator is operating at maximum fan speed.

Suppresses the effects of airborne viruses

Plasmacluster ions break down the projecting spike-shaped proteins on airborne viruses, thus suppressing their effects in about 10 minutes.



- Tested by: Retroscreen Virology Ltd., UK
- Test method: Viruses were suspended in the air inside a 1-m³ box, and the percentage of airborne viruses removed was measured.
- Test results: In about 10 minutes, Plasmacluster ion density of 7,000 ions/cm³ removed 99.0% of airborne viruses.

The following condition can ensure an ion density nearly the same as the 50,000 ions/cm³ Plasmacluster ion density in the 1 m³ box used in the virus proof test.

Actual numbers of ions and disinfecting/purifying effectiveness will vary according to the room conditions (product installation location, air conditioner airflow volume, room size, shape, fresh air ventilation ON/OFF, etc.) and the IG-BC2 operation method.

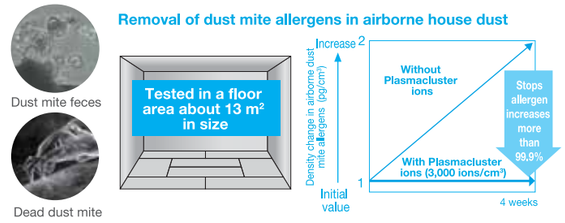
* The ion density generated when IG-BC2 was operated at the HIGH airstream setting, measured a horizontal distance of 0.15 meters from IG-BC2 (in the direction of ion emission), at a height of 0.55 meters from the floor.

However, this does not mean that sterile environment can be created, and does not guarantee that microbial infection will be prevented. In addition, test results do not guarantee similar results in an actual space.

Breaks down and removes airborne allergens such as mite feces and dead dust mites

Plasmacluster ions break down and remove proteins in airborne allergens generated by dust mite feces and dead mites, reducing their effects. In high densities, Plasmacluster ions have even greater power to remove unwanted substances.

Removal of dust mite allergens in airborne house dust

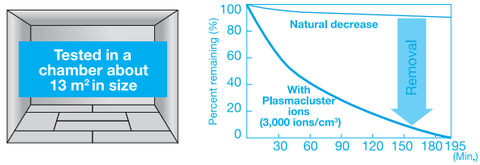


- Tested by: Hiroshima University Graduate School of Advanced Sciences of Matter
- Test method: The effect of airborne dust mite allergens in an uncleaned room (with a floor area of about 13 m²) was measured in an actual home by the ELISA (Enzyme-Linked ImmunoSorbant Assay) method. Sharp converted the results and calculated the average value. (Plasmacluster ion density: 3,000 ions/cm³)
- Test results: Plasmacluster ions removed 99.9% of airborne allergens.

Breaks down and removes airborne mold

Plasmacluster ions remove the cell membrane proteins on airborne mold surfaces, inhibiting their effects.

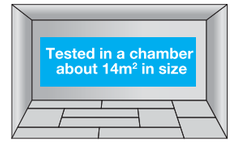
Removal of airborne mold



- Tested by: Ishikawa Health Service Association, Japan
- Test method: Plasmacluster ions were emitted into an experimental chamber with a floor area of about 13 m², and airborne mold was measured with an air sampler. Sharp has graphed the results using approximate figures. (Plasmacluster ion density: 3,000 ions/cm³)
- Test results: In about 195 minutes, Plasmacluster ions removed 99.0% of airborne mold.

Suppresses the activity of airborne microbes

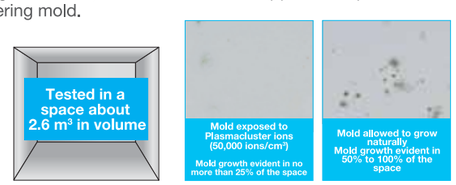
Plasmacluster ions suppress the cell membrane proteins on airborne microbe in about 38 minutes.



- Tested by: Dr. Melvin First, Harvard School of Public Health, USA
- Test method: Microbe was inserted into the air of an approx. 14-m² experimental chamber. The remaining microbe was collected to measure the removal rate. (Plasmacluster ion density: 4,700 ions/cm³)
- Test results: In about 38 minutes, Plasmacluster ions removed 99.0% of airborne microbe.

Suppresses the proliferation of adhering mold

In high densities, Plasmacluster ions suppress the proliferation of adhering mold.



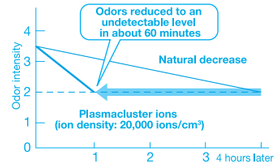
- Tested by: Japan Food Research Laboratories
- Test results: No. 208070713-001 on July 23, 2008
- Test method: Sharp generated ions in a 2.6-m³ space, grew mold on PVC plates for 5 days, and entrusted them to a test institution. Mold growth areas were compared as directed by JIS Z2911. Sharp plotted the results. (Plasmacluster ion density: 50,000 ions/cm³)

* The ion density generated when IG-BC2 was operated at the HIGH airstream setting, measured a horizontal distance of 0.55 meters from IG-BC2 (in the direction of ion emission), at a height of 0.55 meters from the floor.

Removes clinging odors

In about 60 minutes, Plasmacluster ions remove cigarette smoke clinging to the inside of a car. Plasmacluster ions can also remove smells from pets, hanging laundry, and other sources inside a room.

Removal of cigarette smoke odor from cloth



- Tested by: Japan Spinners Inspecting Foundation
- Test method: To evaluate deodorizing effectiveness, the six-level odor intensity indication method was used on a cloth swatch impregnated with cigarette smoke odor components. Sharp has converted and calculated the results. (Plasmacluster ion density: 20,000 ions/cm³)

- This product has functions to suppress the activity of airborne viruses, and to remove allergens such as dust mite feces and dead dust mites. However, these functions cannot produce sterile environment, and cannot guarantee that microbial infection will be prevented.
- Actual numbers of ions and disinfecting/purifying effectiveness will vary according to the room conditions (product installation location, air conditioner airflow volume, room size, shape, fresh air ventilation ON/OFF, etc.) and the IG-BC2 operation method.